

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

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BIBLIOGRAPHY OF
CERTAIN ASPECTS OF RURAL
EDUCATION

(From January 1, 1920, to September 1, 1926)



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LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., March 2, 1927.

SIR: The education of children in rural communities offers problems of such difficulty as challenge the ability and enthusiasm of educators and believers in the national tradition of equality of opportunity for all children, regardless of their residence—whether on isolated farms or crowded city streets. Education for rural children is undergoing a transition; its administration is changing from a political and clerical task to a professional one. Supervising and teaching in rural schools are increasingly becoming recognized as duties testing the mettle of professionally prepared men and women of ability and experience in education. The literature of the subject is growing in bulk and value with the passing of rural education as the educational frontier. It seems to me an opportune time to bring together under one cover material representative of recent contributions which are of a high order of merit to assist school officers and students in the solution of the difficult problems offered in this field. I am, therefore, submitting this bibliography of contributions issued between January 1, 1920, and September 1, 1926, and recommend its publication as a bulletin of the Bureau of Education.

JNO. J. TIGERT,
Commissioner.

The SECRETARY OF THE INTERIOR.

FOREWORD

This annotated bibliography covers the period from January 1, 1920, to September 1, 1926. The following types of contributions have been included: (1) Those that present objective data of sufficient amount and quality to appear to throw light upon the problems considered; (2) analytical studies that set forth new theories that seem to be significant, that give new interpretations to existing data or current practice, or that present critical evaluations of technique employed in research; and (3) studies that are primarily a presentation of present practice through verifiable data. It is believed by the compilers that this somewhat liberal interpretation of what constitutes a "contribution" will, through presenting various types of critical materials, give a bibliography that will be most useful to workers in the field.

Rural education has been defined as that in communities having a relatively low density of population. This can not, of course, be exactly defined on any other than an arbitrary basis, but the limit of 2,500 population will serve as a guide. According to this conception, contributions would be included whether they deal with elementary or with secondary schools; whether the community is devoted largely to farming or mining or fishing; whether the pupils are planning to make agriculture or business or law their life work. The only requirement is that the community be within the population limit suggested. It is evident that only in a general way can it be determined that a study applies to a community under 2,500.

However, in this bibliography certain conditions have warranted the exclusion of materials that would meet the standards suggested. References on the rural high school are eliminated because of the recent publication of a research bibliography on secondary education.¹ Few studies on such a technical aspect of the rural field as agricultural education or in the related field of rural sociology are here included. There is such a large and growing body of literature on these subjects that they properly demand separate consideration. Only where such studies have direct implications for the worker in the general field of rural education have they been brought into this compilation.

¹ Bibliography of Secondary Education Research, 1920-1925. United States Bureau of Education Bulletin, 1926, No. 2.

Contributions that apply equally well to all education, rural or nonrural (as, for example, in the teaching of reading or history) are not included for the reason that they would increase the size of this bulletin beyond reasonable limits.

The bibliography is an outgrowth of plans made by a joint committee on research in rural education of the department of rural education of the National Education Association, and the United States Bureau of Education, formed at the initiation and on the request of the executive committee of the department of rural education. The organization of the bibliography and the responsibility for the units composing it were assumed by a committee that volunteered to attempt the work of compilation. This committee is as follows: Julian E. Butterworth and Clyde B. Moore, of the rural education department, Cornell University; and Mrs. Katherine M. Cook, chief of the division of rural education, United States Bureau of Education. The committee was assisted in the compilation by members of the staff of the division of rural education, by a member of the editorial division, and by the library of the Bureau of Education. Acknowledgment is hereby made, also, to R. H. Barrett, graduate assistant in rural education at Cornell University. The following have also assisted by examining the list and making suggestions concerning it: Macy Campbell, head, department of rural education, Iowa State Teachers College, Cedar Falls, Iowa; Ernest Burnham, director, department of rural education, Western State Normal School, Kalamazoo, Mich.; O. G. Brim, professor of education, Ohio State University, Columbus, Ohio; M. S. Pittman, director of rural education, Michigan State Normal College, Ypsilanti, Mich.; C. G. Sargent, State director of vocational education, Fort Collins, Colo.; Norman Frost, professor of education, George Peabody College for Teachers, Nashville, Tenn.; Mapel Carney, professor of rural education, Teachers College, Columbia University, New York City; Fannie W. Dunn, assistant professor of rural education, Teachers College, Columbia University, New York City.

BIBLIOGRAPHY OF CERTAIN ASPECTS OF RURAL EDUCATION.

ADMINISTRATION AND ORGANIZATION

(See also Surveys)

BUILDINGS AND GROUNDS

Ashbaugh, E. J. and Stevenson, P. L. A score card for rural school buildings. Educational research bulletin, 3: 34-35, 47, January 1924.

Standards and scores for evaluating small buildings.

Butterworth, Julian E. Improving the school building facilities of one and two-teacher districts through measurement. Ithaca, N. Y., 1922. 18 p. (Cornell university. Extension bulletin no. 52, June 1922.)

Presents standards to be used in scoring small school buildings by means of the Butterworth score card. Sample score card is filled out.

— A score card for one and two-teacher school buildings. Journal of rural education, 2: 9-20, September 1922.

Procedure in construction and use described. Sample score card, tables, value. Used in scoring over 1,500 buildings.

Carle, H. M. Organization, housing, and staffing of State departments of education. Washington, D. C., Government printing office, 1925. 16 p. 8°. (U. S. Bureau of education. Statistical circular no. 5.)

Study of the staffs of the State departments of education in the 48 States. Sets forth in tabular form the principal activities carried on in State departments, number of persons engaged in each, housing and quarters, costs of State departments of education, and similar information.

Harshfield, H. W. Janitorial service in the Cuyahoga county (Ohio) school district. 16 p. tables. Published by A. G. Yawberg, county superintendent, 200 Old Court House, Cleveland, Ohio. April 1926. (Mimeograph.)

The median age of janitors is 49; median time in present position, 3 years; all but two have at least a common school education; the median day begins at 5:30 in the morning and ends at 5:30 in the afternoon. On a rating scale 13 out of 37 are graded "A." The median cost of janitor service per square foot is 16.2 cents. Median salary for 12 months is \$135 per month. Other data on size of building handled by one person without extra aid; cost of helpers and supplies; duties performed by janitors.

Ohio. Cuyahoga county public schools. Save \$2,000,000 on better schools in Cuyahoga county: A plan for economy in school building and financing. By A. G. Yawberg and J. A. Baer. 52 p. charts, maps.

Data on location of present buildings, population in 1921, probable population in 1940, school enrollment 1914, 1924, and 1940 (probable), resulting in a suggested building program.

Strayer, George D. A State-wide school building survey. *Journal of educational research*, 1: 204-215, March 1920.

Made in Delaware. Rural buildings scored with respect to site, gross structure, service systems, classrooms, special rooms. Comparative tables. Results showed buildings inadequate.

— and **Engelhardt, H. L.** Score card for village and rural school buildings of four teachers or less. *Columbia university. Teachers college bulletin*, no. 9, January 1920.

Sample score cards; standards for village and rural school buildings of four teachers and less.

Sutherland, Robert H. Thesis 1922, George Peabody college for teachers.

To determine the best orientation of a school building in latitude 36° 10' N., a miniature building was erected upon the campus of the Peabody college; the data were taken daily on clear days with various orientations based upon the criteria. Sunlight is a source of health and sanitation when properly controlled and a source of interference with work when not controlled. Order of preference as to direction of openings at the different hours of opening and closing school is shown as follows:

A. M.	P. M.	Order of preference				
		1	2	3	4	5
8	4	W.	E.	SE.	SW.	S.
9	4	E.	W.	SE.	SW.	S.
9	3	E.	W.	SW.	SE.	S.
9	2	W.	E.	SW.	SE.	S.

COMMUNITY DISTRICT

Carney, Mabel. The community relations of rural schools. Part 3. The teaching personnel. *Rural school survey of New York State*.

A consideration of the legitimate community relations and activities of rural schools, findings of community relations, comparisons and general conclusions, recommendations on the community relations of rural schools.

Searles, Clair Ketcham. The distribution of schools in Washtenaw county according to the community plan. Unpublished study of the Bureau of educational reference and research, University of Michigan, 1923.

Facts collected regarding trading centers, religious centers, school centers, etc., and on basis of these facts recommendations made that the school centers coincide with the natural community centers.

Works, George A. The community as a local unit of rural school administration. *In University of Pennsylvania. Bulletin*, vol. 23, no. 1. p. 131-142 map. 8°. (Ninth annual schoolmen's week. Proceedings, April 20-22, 1922.)

The "community" defined; functions to be performed by the local school organization. Map suggesting community units in Delaware county, N. Y.

CONSOLIDATION AND TRANSPORTATION

Abel, James F. Consolidation of schools and transportation of pupils. Washington, D. C., Government printing office, 1923. 135 p. illus., tables, maps, graphs. 8°. (U. S. Bureau of education. Bulletin, 1923, no. 41.)

A study of the historical development of consolidation and transportation, its present status, and statement of progress by States. Sets forth through tables, maps, graphs, etc., the situation in regard to school consolidation and transportation.

Abel, James F. Recent data on consolidation of schools and transportation of pupils. Washington, D. C. Government printing office, 1925. 24 p. 8°. (U. S. Bureau of education. Bulletin, 1925, no. 22.)

Quantitative study of the movement for school consolidation covering a five-year period from 1918 to 1922. Gives statistical data concerning increase in number of consolidated schools, decrease in number of one-room schools, cost of transportation, number of children transported, etc. Summarizes attitudes of school officials toward centralization movement and some of the influences aiding or retarding it.

— A study of 260 school consolidations. Washington, D. C., Government printing office, 1924. 39 p. 8°. (U. S. Bureau of education. Bulletin, 1924, no. 32.)

A questionnaire study of consolidated schools selected as representative by State departments of education in each of the 48 States. Median school consolidation as judged from 260 schools serves an area of 36 square miles, employs 11 teachers, enrolls 204 children in elementary grades, 76 in high school, pays a salary of \$1,425 per year to high school teachers and \$1,120 per year to elementary teachers, etc.

Baer, Joseph A. Transportation of pupils in Cuyahoga county, Ohio. *Journal of rural education*, 5: 16-21, September, October 1925.

Data from 23 districts; 3,104 pupils transported daily at a cost of 13.6 cents per day per pupil. Compared with United States figures of 18.1 cents. Districts ranked by using index number plan. Recommends practical use of this study. Tables.

Blair, P. D. Factors determining relocation of schools in Crawford county, Pennsylvania. In Tenth annual schoolmen's week, University of Pennsylvania. Proceedings, 1923. p. 112-118.

Gives proposed relocation of schools on the basis chiefly of six factors: Present site and its adaptability for the new school; distribution of population; avenues of travel and prospective new roads, trolley and railroad accommodations; climatic conditions; types of population; and attitude of people.

Bock, Thomas E. The nature of the local survey as made in New York: what it requires. In University of Pennsylvania. Bulletin, Vol. 23, no. 1. p. 142-151. 8°. (Ninth annual schoolmen's week. Proceedings, April 20-22, 1922.)

Presents forms for recording data in studying local reorganization projects.

Campbell, Macy. The Iowa plan of training superintendents and teachers for consolidated schools. Washington, D. C., Government printing office, 1923. 5 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 17, June 1923.)

Training rural school teachers and superintendents for consolidated schools in Iowa.

— Orange township consolidated school, Black Hawk county, Iowa. Washington, D. C., Government printing office, 1924. 6 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 30, November 1924.)

Describes how a consolidated school builds up a community in Iowa.

— and others. An intensive study of transportation in 37 typical Iowa consolidated schools. *Journal of rural education*, 3: 246-253, February 1924.

Horse and motor transportation compared. Latter \$2.41 more per year per pupil. Motor more satisfactory. Tables showing average miles and average pupils per route; cost per pupil per year for each district.

Cates, A. J. W., Hartaler, C. H. and Kulp, A. M. Redistricting Montgomery county, Pennsylvania. In Tenth annual schoolmen's week, University of Pennsylvania. Proceedings, 1923. p. 118-132.

A proposed redistricting of the county and a relocation of schools to provide as nearly as possible equal educational facilities at more uniform tax rates. A technique is suggested for determining the probable cost of each proposed district.

Connecticut. State board of education. School consolidation in Connecticut. Brief history and present status of the movement. Hartford, Conn., State board of education, 1925. 14 p. 8°. (Research bulletin 1, series 1925-1926.)

In 1899, 48 towns transported 773 pupils; in 1924, 150 towns transported 8,740 pupils to elementary grades. There are now only 294 one-room schools left; in 1900 there were 364.

Consolidation of schools in Maine and Connecticut. Washington, D. C., Government printing office. 12 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 4.)

Reports on the progress made in consolidating schools in the States of Maine and Connecticut. Indicates consolidation under town unit not directly comparable with that under district or county organization.

Cook, Katherine M. Distribution of consolidated and one-teacher schools. *Journal of rural education*, 4: 338-347, April 1925.

A study of distribution of rural population served by, and school attendance in, different types of schools.

— **Principles of kindergarten-primary education in the consolidated rural school.** Washington, D. C., Government printing office, 1923. 9 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 18, June 1923.)

— **School consolidation and rural life.** Washington, D. C., 1922. 4 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 1, February, 1922.)

— **Suggestions for the reorganization of the schools in Currituck county, North Carolina.** Washington, D. C., Government printing office, 1921. 31 p. 8°. (U. S. Bureau of education. Bulletin, 1921, no. 24.)

The study made to assist school officials in reorganizing the administrative system of schools of the county. A study of topographical, social, and economic conditions, location of schoolhouses, distribution of population and efficiency of schools, etc. Program for consolidating schools, for supervision, salary scale for teachers, etc. recommended.

— **and Deffenbaugh, W. S.** The feasibility of consolidating the schools of Mount Joy township, Adams county, Pennsylvania. Washington, D. C., Government printing office, 1920, 28 p. 8°. (U. S. Bureau of education. Bulletin, 1920, no. 9.)

The problem of the study is to discover whether or not schools of Mount Joy township can be effectively and economically consolidated. A study of topography, roads, economic, and social conditions of the township; location and condition of schools; salaries of teachers, etc., was made. A tentative plan for uniting the seven one-room schools was suggested.

— **and Windes, E. E.** Suggestions for consolidating the rural schools of Beaufort county, North Carolina. Washington, D. C., Government printing office, 1923. 8°. (U. S. Bureau of education. Bulletin, 1923, no. 48.)

Sets forth the results of a survey of school conditions in Beaufort county, N. C., and outlines a plan for county-wide consolidation, making suggestions for location of buildings and improvement of instruction in the rural schools of the county.

Duke, E. A. School consolidation and transportation of pupils in Oklahoma, 1926. [Oklahoma department of education, 1926] p. 79. tables, illus. 8°. (Oklahoma. Department of education. Bulletin no. 118.)

Data regarding conditions in Oklahoma.

Faulk, J. W. Consolidation of schools and transportation of pupils in Lafayette parish, Louisiana. Washington, D. C., Government printing office, 1923. 10 p. illus. 8°. (U. S. Bureau of education. Rural school leaflet no. 19.)

Florida. State department of public instruction. Consolidation of schools. Tallahassee, Fla., State department of public instruction [1924] 27 p. 8°. (Florida school bulletin, vol. 1, no. 5, September 1924.)

A summary of consolidation of schools in Florida and historical setting of movement.

Green, Harry E. The efficiency of various methods of transportation in the schools of Colorado. Master's thesis, Colorado State teachers college, 1925.

A study of relative merits of the various forms of pupil transportation, methods of financing and administering same. Includes the history of pupil transportation in Colorado; agricultural conditions; and transportation information, such as drivers, vehicles, routes, time, expense, etc. Findings favorable to district ownership of motor buses.

Greist, O. H. Consolidation of schools in Randolph county, Indiana. Washington, D. C., Government printing office, 1923. 12 p. illus. 8°. (U. S. Bureau of education. Rural school leaflet no. 12.)

Hall, William F. Rural school consolidation and transportation in Pennsylvania. State college, Pa., 1925. 47 p. tables, maps, graphs. 8°. (Pennsylvania State college. School of education research series, vol. 2, no. 2, May 1925.)

Data regarding school plant, teachers, pupils, and transportation in Pennsylvania in 1923-24. A table on comparisons of cost of transportation to consolidated and "other" schools is included.

Hayes, Augustus W. Community value of the consolidated rural school. New Orleans, La., Tulane university of Louisiana, 1923. (Research bulletin no. 2, February 1923.)

A study made of 58 rural consolidated schools in Louisiana, 46 in Alabama, and 40 in Mississippi. Sample questionnaire and tables. Consolidated rural schools in these three States are rapidly becoming leading forces for stimulating community fairs, boys' and girls' clubs, pageants, picnics and fêtes, athletic events; in fact furnish basis for organization of community interests. The need for careful, intelligent planning for rural school consolidation emphasized.

Illinois. State department of public instruction. Consolidation of schools in Illinois and data from other States. Prepared by U. G. Hoffman and W. S. Booth. [Springfield, Ill.] 1921. tables, illus., map, diagrs. 8°. (Circular no. 152.)

Four hundred and fifty districts consolidated to form 123 union schools in Illinois. Transportation furnished in 30 schools by districts. Cost is \$87,249.

Iowa. Department of public instruction. Iowa's consolidated schools. By George A. Brown, Consolidated school inspector. Des Moines, Iowa, 1922. 103 p. illus., tables. 8°.

A descriptive and statistical survey of Iowa's 439 consolidated schools, January 1, 1922. School law, reports, and inspection show organization and condition. The tax rate much lower in consolidated districts than in city districts. Many new buildings erected. Organization slackened on account of low farm prices at time survey was made.

Larson, Emil L. One-room and consolidated schools of Connecticut. A comparative study of teachers, costs, and holding power. [Doctor's dissertation.] Teachers college, Columbia university, New York city, 1925. 62+v p. tables, diagr., map.

A study of records and reports of 98 Connecticut towns to determine the comparative costs, teacher qualification, and holding power of the two types of schools. Costs no greater in consolidated schools. Holding power is superior in consolidated schools, and their teachers better trained.

Lathrop, Edith A. How laws providing for distribution of State school funds affect consolidation. Washington, D. C., Government printing office, 1922. 4 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 5, August 1922.)

Massachusetts. Department of education. Committee on school transportation problems. Report (Framingham conference), April 29, 1925. [Boston, Mass., 1925.] 24 p. tables. (Mimeograph.)

Data relating to means of conveyance, distances covered by conveyances, cost per pupil, ownership of busses, transportation time, etc.

— **Division of elementary and secondary education and normal schools.** Consolidation of schools and transportation of pupils at public expense in Massachusetts. Boston, Mass., 1920. 27 p. tables. 8°. (Bulletin of the department of education, 1920, no. 6.)

Gives history of consolidation in the State growth of transportation expenses 1888 to 1910; character of buildings; present extent of consolidation; types of consolidated schools; and data on number transported, distance, costs, etc., in 1919.

Minnesota. State department of education. Report of consolidated schools 1924-1925. 10 p. (Mimeograph.)

A survey report of the consolidated schools in Minnesota showing numbers of teachers, attendance, costs, and transportation in small and large high schools, one-teacher, and graded elementary, consolidated schools. The report shows that 360 consolidated schools transport or board 30,819 pupils at a cost of \$1,055,070. The total enrollment is given as 95,678; total number of teachers, 4,058.

Mississippi. State department of education. Consolidated schools in Mississippi. By J. T. Calhoun, State rural school supervisor. [Jackson, Miss., 1922-23.] 119 p. 8°. (Bulletin no. 34. Session 1922-23.)

Sets forth the present condition of consolidation in Mississippi; its growth and value; 751 consolidated schools in 82 counties; 43,497 pupils transported at \$100.101 per month. Average cost per pupil per month is \$2.88.

Montoya, A. The consolidated schools of Bernalillo county, New Mexico. Washington, D. C., Government printing office, 1924. 8 p. illus. 8°. (U. S. Bureau of education. Rural school leaflet no. 22.)

Morris, George M. Centralization and consolidation of schools in Ohio. Columbus, Ohio, State department of education, July 1925. 4 p. table.

Data relating to number of consolidated and small schools, transportation, conveyances, cost, and the like.

Sargent, C. G. Consolidated schools of the mountains, valleys, and plains of Colorado. Fort Collins, Colo., Colorado agricultural college, 1921. 60 p. 8°. (Colorado agricultural college bulletin. Series 21 June 1921, no. 5.)

A survey of the consolidated schools of Colorado giving a good description of them and comparing their work to that of city schools. Points out their value over the one-teacher schools by giving data on attendance before consolidation and after. Cost more but no more than other good schools.

— The consolidated schools of Weld county, Colorado. Washington, D. C., Government printing office, 1923. 11 p. illus. 8°. (U. S. Bureau of education. Rural school leaflet no. 13.)

Selke, George A. Transportation costs in Minnesota consolidated schools. Washington, D. C., Government printing office, 1924. 7 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 20.)

A study of the costs of transportation per pupil per year per mile with other data from 321 consolidated schools in Minnesota, arranged in six groups according to number of pupils transported. Gives total, average, median, quartile, and inter-quartile costs by groups of schools.

Shriber, J. H. Transportation of school children in Colorado . . . Fort Collins, Colo., Colorado agricultural college [1920] 54 p. illus., tables, diagrs. 8°. (Colorado agricultural college bulletin. Ser. 20, no. 18, 1920.)

Data regarding type of transportation vehicle, cost of upkeep, yearly depreciation, cost per mile per day, and the like, for 12 schools.

Smith, M. L. and others. A survey report concerning the 172 consolidated schools of Kansas. *Journal of rural education*, 5:27-30, September-October, 1925.

Data regarding enrollment, teachers, area, valuation, tax rates, etc.

South Dakota. Department of public instruction. Standards and laws pertaining to State standard rural schools and State consolidated schools of South Dakota and other States. Issued by the Department of public instruction, Fred L. Shaw, superintendent. Pierre, S. Dak., State publishing co., 1923. 96 p. illus., plans. 8°.

Pages 68 to 81 give data for 1921-22 regarding number of routes, greatest distance traveled by any one pupil, drivers' salary per month, days bus did not run, number pupils transported, enrollment, number of sections in district, and cost of building.

Unger, John C. The new school. Greeley, Colo. Master's thesis, Colorado State teachers college, 1920.

A study of the rural schools of the United States to point out the necessity for consolidation. Includes State laws, consolidated systems, and teacherages. Recommends men principals for consolidated schools; teacherages for the teachers; a nine months' term for the rural school up to the eighth grade; other courses arranged to take care of the older boys who must work on the farm from April 1 to December 1.

Utah. State department of public instruction. A study of transportation in the schools of Utah, by a committee, C. H. Skidmore, chairman. 35 p. tables. 8°.

Average cost per pupil on census list in Utah for transportation in 1921-22 was \$1.73; in 1923-24 it was \$1.91. The median auto route was 7 miles; wagon route, 4 miles. Auto transportation cost \$35.58 per pupil transported; wagon, \$22.64. Recommends standardized bookkeeping for transportation costs.

COUNTY SCHOOL SYSTEMS

Brown, J. B. County and city school systems of Tennessee for the year ending June 30, 1921. Biennial report of public instruction of Tennessee, 1921-22.

Annual cost per pupil more in city than country; 72.3 per cent of State enrollment in rural elementary schools. Lack of money cause of great retardation and elimination of pupils in rural schools. Comparative charts.

Burris, Benjamin J. Necessity of the county unit for the efficient administration of rural schools. *Journal of rural education*, 2: 304-311.

An analysis of the situation in Indiana, with data showing what might be done through the county unit.

— The county school system, how organized and administered. Indianapolis, Ind., 1924. 56 p. maps, tables. 8°. (Indiana. Department of public instruction. Education bulletin no. 73.)

A study to show merits of the county unit for administration. Considerable data from several States. Careful conclusions drawn.

California. Special legislation committee on education. Report. Sacramento, Calif., California State printing office, 1920. p. 32-52.

The pages cited discuss the problem of reorganizing the county in California. Give data regarding the number of small schools in each county of the State, and present a proposal for the relocation of schools in San Mateo county.

Conway, John V. The county unit in New Mexico. Washington, D. C., Government printing office, 1924. 10 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 28.)

A study of the inauguration and conduct of the county unit of school administration in New Mexico. Sets forth certain improvements in school conditions inaugurated as the results of the system.

Coon, Charles L. The beginnings of a county school system. *Journal of rural education*, 2: 352-355.

Developments in Wilson county, N. C., from 1913 to 1922.

Davis, Edward Everett and Shelby, T. H. County unit of school administration in Texas. Austin, Tex., The University [1922] 63 p. diagrs. 8°. (University of Texas. Bulletin no. 2226, July 8, 1922.)

Presents data regarding school conditions in Texas and shows what the county unit of administration might do to bring improvement.

Davis, T. S. Recommendations of the rural survey committee relative to the county unit of administration for Pennsylvania. In Twelfth annual schoolmen's week. Proceedings. p. 47-51. (University of Pennsylvania bulletin, March 1925.)

Three hundred and thirty-two rural schools in 11 typical rural counties visited. Study made of houses, grounds, and equipment; health, attendance, taxation, and administration.

Gifford, W. J. Some comparisons of the educational status of the counties of Virginia. *Virginia journal of education*, 8: 251-254, March, 1920.

A study of the relative ranks of the 100 counties of Virginia in the items of (1) professional interest; (2) professional training; (3) average salaries; and (4) per cent of attendance based on school population. Conclusions: (1) certain counties lack professional interest; (2) definite connection between professional interest, training, and salaries seems indicated; (3) a county has a tendency to maintain an efficient or a relatively inefficient system.

Indiana. University. Extension division. A county unit of school administration. Bloomington, Ind. 52 p. tables, bibliography. 8°. (Bulletin, vol. 11, no. 6.)

A study made as a guide for high school debating leagues of Indiana. History of movement from records. Statistics for many counties. Gives merits of county unit and also demerits.

Melcher, George. The county unit bill. Crime number one. *Missouri school journal*, 39: 124-27, March; 234-35, May; 260-61, June 1922.

A study to show the need of the county unit in Missouri. Statistics of the State school system show attendance in rural and urban school costs, grades of pupils, grade enrollment, numbers graduating from urban and rural schools, and overhead outlay per teacher. Enrollment about same in the two types of schools. Rural schools graduate fewer pupils and costs greater in rural schools. Many rural schools with few pupils making overhead expense great.

Sargent, C. G. Better country schools in Colorado. A first-class district to replace the third-class school districts of each county. Denver, Colo., Eames bros., printers, 1925. 19 p. tables, map.

Data showing inequalities in school burden and arguments for a county unit organization.

Visher, Stephen S. Contrasts among Indiana counties in salary, enrollment, graduation, and costs. *Indiana teacher*, 69: 7-9, September 1924.

Data show marked variations among the counties on the factors indicated.

Walker, Thomas J. The county unit. *School and community*, 8: 257-261, June 1922.

An attempt to show feasibility of county unit. Careful analysis of situation in Missouri as to cost, etc. County unit recommended as practical and possible for Missouri.

Webb, John A. County educational reorganization. Master's thesis, Colorado State teachers college, 1922.

School administration must be improved to give its boys and girls suitable education. Data from surveys, United States bulletins, statistics, reports, laws. The district, township, magisterial, and county unit plans of organization were studied. Recommends the adoption of the county unit plan of organization, because of the satisfactory results obtained by the States using this plan.

FINANCE

Abbott, Thomas C. How Arkansas is financing education. Arkansas teacher, 9: 5-18, December 1921; 10: 4-7, January 1922; 5-9, February 1922; 14-19, March 1922.

"This study attempts to show what Arkansas is actually doing in the way of financing her educational programs." It shows: That Arkansas is a rural State; that the State is relatively lower in a school efficiency scale than in a wealth distribution table of all the States; that the property assessment of the State is about 20 per cent of the true value; that the relative tax burden and character of schools indicate that Arkansas is paying a very scant sum for her poor schools.

Arizona. State superintendent of public instruction. Influence of increased attendance and increased living costs on school expenditures. In his Sixth biennial report, 1922. p. 96-97.

Table and diagram. Emphasizes the fact that school expenditures are not readily adjusted to changing conditions.

Baldwin, Robt. D. Provisions of the several States for financing rural education. Doctor's thesis, Cornell university, 1926.

Summarizes the legal provisions of the various States for aiding in the financing of the small school, consolidation, transportation and board, rural high schools, county high schools, tuition of non-residents, rural supervision, rural and consolidated building aid, standard schools, and better salaries. An evaluation of these methods for aiding in the financing of rural education is undertaken so far as available data permit.

Brooks, John David. The financial administration of the rural elementary schools of the United States as determined by State laws. Doctor's dissertation, University of Pennsylvania, 1925.

A descriptive investigation of financial phases of rural education throughout the United States.

Callahan, John. Equalizing educational opportunity in Wisconsin. Department of public instruction, 1924. 62 p. tables, graphs.

Pages 46-58 give data regarding distribution of real taxable wealth in one-teacher districts.

Colorado. University. Financing of public-school education in Colorado. Boulder, Colo., 1924. 91 p. tables. (University of Colorado studies, vol. 24, no. 1, June 1924.)

A study of the financing of public education in Colorado. Complete data with many comparisons in tables showing other State records.

Colton, Albert S. Council committee reports. Amendment no. 16. Sierra educational news, 19: 17-18, January 1923. (See also November number for a study of this same subject.)

A study to show the results of California constitutional amendment 16 upon teachers salaries, county tax rates, the amounts of money received from State and counties, and upon length of school terms. Statistics show 25 per cent of districts paying less than \$1,200 per teacher under new law. County rate increased in some counties to meet State apportionment to schools. Fewer short school terms.

Davis, Homer. Reasons for a State school tax. The Arizona teacher and home journal, 11: 20-23, December 1922.

A statistical study of school costs in Arizona by counties, 1923. Shows inequalities in tax rates, valuations, and length of terms. Valuations vary from \$5,268 per pupil to \$31,212. Terms vary from 140 days to 180. Tax rates vary from 1 to 6.66 per cent. Entire county basis not best.

Dodd, J. H. Should the State or the local support of schools in Kentucky be increased? Kentucky school journal, 4: 18-25, January 1920.

From data regarding inequalities of educational opportunity in Kentucky and from facts showing that the poorer counties are raising more money proportionately than the wealthier counties, the writer concludes that further State aid to the less wealthy is desirable.

Foster, M. A. Education pays the State. Washington, D. C., Government printing office, 1925. 27 p. 8°. (U. S. Bureau of education. Bulletin, 1925, no. 33.)

An attempt to find out if education does pay the State. Compare expenditures for education in 1910 with apparent results as shown in percentage of illiteracy in 1920. Makes certain comparisons concerning education and wealth in the various States. Gives certain objective data which indicate that properly applied expenditure for education tends to increase income and wealth, aids in decrease of illiteracy, and leads to higher standards of living.

Hill, A. B. Inadequacy of school revenue in many districts in Arkansas. Journal of Arkansas education, 2: 9-11, January 1924.

A study to show inadequacy and inequality of Arkansas school financing system. Statistics for each county show per cent of districts voting maximum rate. Many districts unable to raise more than \$200 annually.

Holy, T. C. Relation of size to cost of operation in certain schools of Iowa. Journal of rural education, 3: 317-322, March 1924.

Comparative tables showing the larger the school the more economically it can be run. Consolidated and second-class city schools compared.

Howard, George, Jr. Problems involved in the administration of State aid for transportation. Journal of rural education, 3: 389-392, May, June 1924.

Twenty-four States provide some aid and 24 furnish no aid. Aid should not be apportioned on any single basis, but on truck tonnage, distance, and type of road.

Hudson, C. A. School costs in a group of Ohio villages ranging in population from approximately one thousand to three thousand. Educational research bulletin, 5: 175-179, April 1926.

In 18 villages the average wealth per pupil in average daily attendance was \$8,610; the cost per pupil in average daily attendance, \$76.13; the average tax rate, 20.6; the average per cent school tax is of total rate, 36.2; school district indebtedness per \$1,000 of wealth, \$10; debt per pupil in average attendance, \$74.28.

Jaggers, R. E. Financing the rural schools of Kentucky through local community effort. Kentucky high school quarterly, vol. 11, October, 1925.

A study of Kentucky's rate and amount of taxation to determine if an increase in the present tax rate for school purposes is the thing that is needed for the proper financing of public education in Kentucky. Questionnaires were filled out by all the county superintendents of the State. Revision and redistribution of school funds, higher standards and better qualifications for teachers, removal of a limit on local taxation.

Loomis, A. K. The financial aspects of school administration in small and medium sized high schools in Kansas. Journal of rural education, 2: 151-158, December, January 1922.

Outstanding causes of excessive cost per pupil and high mill levies. Tables. Both types expensive.

Maryland. State board of education. Cost of rural vs. graded schools. In Fifty-eighth annual report. p. 177.

Table showing cost per pupil in all elementary schools, one-teacher schools, two-teacher schools, graded schools. Two-teacher schools highest, graded schools lowest.

Michigan State teachers' association. A uniform financial procedure for the public schools of Michigan having a population of 2,000 or less. Bulletin no. 4, pt. 2. Prepared by the committee on uniform child accounting and unit costs (A. B. Moehlman, chairman). Lansing, Mich., April, 1925.

Gives suggested forms for budget, receipts, disbursements, voucher-check, warrants, etc.

Moore, R. C. and Grimm, L. R. Inequalities in educational opportunities: our one-room schools. 15 p. tables, graphs. 8°. (Reprinted from Illinois teacher, November 1924.)

Gives data from over half the 10,000 one-room school districts regarding equalized assessed valuations and tax rates. Marked variations even in the same county are shown to exist.

Beeder, W. G. and Whitmer, J. W. The county tax as an equalizer of educational opportunity in Ohio. Educational research bulletin, 4:177-182, April 1925.

Gives data on wealth per child of school census, age, wealth per teacher in elementary schools, expenditures for certain items, and amount returned to each district in Lucas county, Ohio.

Swift, Fletcher Harper. Federal aid to public schools. Washington, D. C., Government printing office, 1922. 47 p. 8°. (U. S. Bureau of education. Bulletin, 1922, no. 47.)

Reviews the policies of the Federal Government in dealing with the problem of public education.

— Sound methods of school finance as a means of equalizing educational opportunity in Texas. Texas outlook, 8:8-12, February 1924.

Inequalities of opportunity and ability among districts and counties of Texas.

— State policies in public-school finance. Washington, D. C., Government printing office, 1922. 54 p. 8°. (U. S. Bureau of education. Bulletin, 1922, no. 6.)

An extensive study of methods of financing schools in a number of States with the idea of discovering trends in practice. Laws and their operation in the States covered were studied and leading tendencies set forth.

Towne, Geo. L. Can adequate financial support be secured for rural schools? Idaho teacher, 3:40-41.

A study showing number of schools spending less than \$1,000 a year in typical counties in each of five States. Also shows smallest and largest amount spent annually in one-teacher schools in same counties. Figures indicate about one-half rural schools have less than \$1,000 as total receipts.

Walters, L. M. School revenues. Ohio educational monthly, 72: 75-78, March 1923.

A study of Ohio school revenues and expenditures from 1890 to 1921. The per cent of total expended for buildings is shown, also the per cent of total received from sale of bonds during these years. Data show a variation in these percentages, with per cent from bonds greatest last year.

Works, George A. Organization and financial support. Ohio State educational conference. Proceedings of the fifth session. 1925. p. 165-176. In The Ohio State university bulletin, vol. 30, no. 2

A critical evaluation of purposes of State school funds. Contends that "stimulation" is needed as a purpose along with "equalization."

Works, George A. Distribution of State aid to schools in Texas. Thesis, Harvard university, Graduate school of education, June 1925.

Reference furnished by Dorcas M. Bishop, librarian. No annotation supplied.

Yu, Chia Teh. A study of special State aid to rural schools in Minnesota. 64 p. tables. 8°. Master's thesis, Graduate school, Cornell university, August 1924.

In equality of school burden due to wealth and interest of community. Richer counties spend less per pupil than poorer. Present system of equalization unsatisfactory. Plan recommended.

INDEX NUMBERS

Benner, Thomas E. Index number study of rural elementary schools. In Alabama. Department of education. Annual report, 1920. p. 32-43.

Study is based on the average scores of 10 phases of the educational situation in each of the 67 counties. Tables and diagrams. Shows which school systems have weak teaching staffs; salaries these teachers are receiving; and value of teaching equipment per teacher employed.

Brown, E. E. A statistical survey by counties of education in Oklahoma. Oklahoma City, Department of education [1925] 65 p. (Oklahoma. Department of education. Bulletin no. 110.)

Relative achievement in education of the counties as measured by certain index factors.

Maryland. State board of education. A numerical measure of Maryland's school efficiency in 1924. In Fifty-eighth annual report. p. 21-27. charts, tables.

Comparison of index numbers past six years. Gain of five points over last year. Educational efficiency index number shows increase over last year also. Index numbers each county, white and colored schools.

Schrope, J. M. An index number for district school systems of Schuylkill county. Pottsville, Pa., 1921. (Pennsylvania. Department of public instruction. Bulletin, 1921.)

Survey of school systems of 68 districts in the county using the 10 sets of data employed by Ayres. Tables.

Stern, Bessie C. Maryland schools in 1920-21. In Maryland. State board of education. Annual report, vol. 55, July 1921. p. 7-17.

Index number, average number of days schools were open, attendance, number and per cent of one-teacher schools, average salary per teacher, total costs per pupil, analysis of school expenses. Charts, tables, diagra.

Stetson, Fred L. and Almack, John C. County school systems of Oregon. Salem, Oreg., 1921. 26 p. tables, diagra. 8°. (Oregon. State department of education. Bulletin.)

Comparisons made on 10 points of efficiency over a period of six years. Data show uniform progress.

LEADERSHIP AND PUBLICITY

Alexander, Carter. Publicity work for better support of rural schools. Journal of rural education, 2: 289-298, March 1923.

How to secure better support through publicity. Appeals and how to present them. Lists showing relative strength of motives which influence people to vote more support, as determined by 60 workers in 17 States.

Peck, R. B. and Stevenson, P. R. Rural publicity. Educational research bulletin, 2: 315-320, November 1923.

Questionnaire method used. Study of replies from 50 individuals representing 25 States. Sixty-six per cent of campaigns conducted for capital outlay. Majority of campaigns organized under manager plan. The most effective means of publicity were personal interviews, mass meetings, favorable talks before local clubs and newspapers. Features contributing to success of campaign were support by leading citizens, and support by teachers and local boards. Leading motive which influenced people to vote favorably was to give one's children as good a chance in life as any children get. Tables and suggestions for improving campaigns.

Barick, C. E. Selling rural education to the public in Kansas. In National education association. Addresses and proceedings, 1923. p. 827-834.

A short summary of results of the educational survey of rural and graded schools in Kansas by a member of the commission provided for by the State legislature, in 1921, to study State school system. Representative samplings of schools were examined in 17 counties comprising 4,244 pupils in 132 schools. Achievement tests given, reports studied, and conditions observed. Graded school pupils found to be one year or more in advance of rural pupils. Rural schools (one-teacher), with eight months terms, no better than those with seven-month terms.

MISCELLANEOUS

Aker, Howard Marshall. The county superintendent and rural education in Wisconsin. Ph. M. thesis, University of Wisconsin, 1925.

A study of rural education in Wisconsin. Questionnaires to county superintendents and reports of the State superintendent used. Changes law, making the county superintendent's office appointive, with indefinite term, and increases powers of the county boards with the county as the unit of taxation and administration. Surveys of conditions in the State, on which to base plans of consolidation wherever practicable. Improved means of apportioning State funds.

Driver, Lee L. County superintendents' problems. Journal of rural education, 2: 405-412, May 1923.

Results of data received from county superintendents on such matters as outstanding needs of office of county superintendent, powers superintendent should have, qualifications of superintendents, etc.

Edmonson, J. B. Preparation of Michigan superintendents in smaller systems. - Moderator-topics, 44: 203, November 20, 1923.

A study based on questionnaires returned by 138 Michigan superintendents in towns of less than 2,000 population. Gives teaching experience and, type and scope of training from elementary grades to date of study.

Hood, William B. State laws relating to education enacted in 1918 and 1919. Washington, D. C., Government printing office, 1920. 231 p. 8° (U. S. Bureau of education. Bulletin, 1920, no. 30.)

The object of the study is to find the trend in modern legislation concerning schools and set forth the accomplishments made. A study of all the laws enacted by legislatures meeting in the years indicated was made, and summaries of laws under selected headings set forth.

Bulletins, 1922, Nos. 13, 20, and 43, of the U. S. Bureau of education, are similar studies for the years 1919-20, 1920-21, and 1921-22, respectively.

Irion, Theo. W. H. Missouri as an educational central tendency of the United States. American schoolmaster, 14: 82-83, March 1921.

Michigan measured by Missouri, an educational central tendency, and by the United States as a whole. Statistics for city and rural sections given separately. Comparisons of attendance, length of school term, daily cost per pupil, etc., show that Michigan ranks somewhat above Missouri educationally.

Jamison, Mary E. The grading of seventh and eighth grade manuscripts, percentage of failures, and reasons therefor. *South Dakota educator*, 37: 22-24, January 1924.

A study of the responses from 49 county superintendents to requests for statistics. Percentage of failures during three years. Suggested remedies given.

Lathrop, Edith A. Improvement of rural schools by standardization. Washington, D. C., Government printing office, 1925. 28 p. 8". (U. S. Bureau of education. Rural school leaflet, no. 32.)

A study of methods of standardizing rural schools prevailing in the various States.

Malcolm, David J. Rural school administration in Massachusetts. *Journal of rural education*, 3: 203-206.

A statement of the operation of the union district system.

Massachusetts. Department of education. Committee on progressive movements in rural education in Massachusetts. Report, 53 p. 7 (Mimeograph.)

Illustrations, together with some data, on such phases of school work as consolidation, transportation, junior high schools, teachers' salaries, teacherages, buildings, supervised study, etc.

National education association. Research division. Inadequacy of our country schools [and other articles]. Research bulletin of the National education association, January 1923.

The rank of the country school. State reports and statistics, including finance, term, teacher qualification, equipment, and other items show that the rural school is far below the urban school in these points.

Nelson, Milton G. A suggested method for the study of the activities of district superintendents of schools in New York State. 61 p. 8". Master's thesis, Graduate school, Cornell university, June 1925.

Work of district superintendents classified into 36 basic activities. Method of analyzing work suggested.

Newbold, N. P. Negro education in North Carolina. *Journal of rural education*, 4: 145-156.

North Carolina appropriated \$2,200,000 for higher education for negroes during the period 1919-1923. In 1918-1919, there were 3,770 negro public-school teachers in the State. In 1923-1924 there were 5,037. Gives data on Rosenwald schools and Jeanes county supervisors.

Beeder, Ward G. The chief State school official. Washington, D. C., Government printing office, 1924. 167 p. 8". (U. S. Bureau of education. Bulletin, 1924, no. 5.)

A study of the office of the chief State school officer in the 48 States. Treats the evolution of the office, legal provisions for establishing and maintenance, official designation, qualification for holding office, methods of selecting the incumbent, term, salary, and other information regarding the office, including information concerning the relationship of chief State school officer to State board and State department of education.

United States. Bureau of education. Manual of education legislation. Washington, D. C., Government printing office, 1924. 51 p. 8". (Bulletin, 1924, no. 36.)

A manual for the information of educational committees of State legislatures and others interested in educational legislation. Sets forth the practice in educational legislation under such headings as school organization and administration, school costs and school support, school attendance and compulsory attendance laws, school buildings and grounds, etc. Suggests the desirability of the study of existing legislation in all States by each State before launching out on a new program.

PUPILS

Ayar, Adelaide M. A study of rural school attendance. National education association. Addresses and proceedings, 1925. p. 526-530.

Study made to determine actual attendance of rural children of the United States; the effect of attendance upon school work; and how school attendance is affected by child labor. It includes records of 72,120 children of 70 counties of 10 States. Median attendance for all types of rural schools was 141.7 days; attendance in two-room schools slightly better than in consolidated schools; long terms found best for good attendance. As school attendance fell off all school work deteriorated. Comparative tables.

Brown, Sara A. School attendance of children 14 and 15 years of age in Virginia in 1925. 8 p. 8". (National child labor committee, no. 330.)

Study shows percentage of children who finished elementary schools—rural and urban—attendance, causes of absence, compulsory school laws, etc.

Burdge, Howard G. Our boys: a study of the 245,000 sixteen, seventeen, and eighteen year old employed boys of the State of New York. Albany, N. Y., J. B. Lyon co., 1921. 345 p. tables, diagrs. (State of New York: Military training commission. Bureau of vocational training.)

In this study data are presented regarding 14,529 employed farm boys in such a manner that comparisons can be made with boys from cities of different size.

Cooper, Richard W. and Cooper, Hermann. The one-teacher school in Delaware. A study in attendance. Newark, Del., University of Delaware press, 1925. 434 p. tables, graphs, illus.

Data show that one-teacher schools have generally more over-ages, more failures, and more absences than larger schools. Correlation between attendance on the one hand and over-ages and failures on the other. Causes of absences.

Cowart, R. W. Where do rural children go to school? Alabama school journal, 43: 11, December 1925.

Nineteen and nine-tenths per cent of rural white children in Alabama are in schools of one teacher; 27.8 per cent in those of two teachers; 17.3 per cent, three teachers; 9.3 per cent, four teachers; 7.4 per cent, five teachers; and 18.4 per cent, six or more teachers.

Crompton, Ethel Howard. A study in grade grouping in rural schools. M. A. thesis, George Peabody college for teachers, 1925.

A questionnaire study of grade groupings and teachers' loads in rural or small town schools. The greater per cent of teachers and supervisors preferred to teach five different lessons over twice each to two divisions of the same grade rather than to teach 10 different lessons to two different grades.

Folks, Gertrude. Farm labor and school attendance. School life, 4: 16-22, May 1920. Also in National child labor committee, New York. Pamphlet 300, February 1920.

Illiteracy in country twice that of cities. Lack of rural school attendance in many sections and irregularity of attendance. Charts. High percentage of retardation due to absence for farm work. Enforcement of compulsory attendance laws and reorganization of rural schools recommended.

Hopper, A. M. Age and grade distribution in Louisiana schools. Southern school work, 10: 332-33, May 1922.

Data show age-grade distribution in 1920-21 of 27,311 pupils in 267 schools in 50 parishes in Louisiana. Information obtained by visits to schools of members of department of rural and elementary education. Study shows a large amount of retardation, especially in the lower grades. Poor teaching greatest cause of retardation; many over-crowded classes; the only basis for grouping pupils should be ability to do work.

- Illinois State teachers' association.** Department of research and statistics. High school record of rural-trained and of city-trained children. Springfield, Ill., 1924. 4 p. (Multigraph.)
- Which pupils do better high-school work, those trained in one-teacher schools or those trained in city schools? Records of 3,500 high-school pupils in 97 Illinois high schools, obtained by questionnaires, show that rural trained pupils average lower in class work than city trained pupils.
- Lehman, H. C.** A comparison of the play activities of town and country children. *Journal of rural education*, 5: 253-259, January-February 1926.
- Data from town and country children in Kansas as to number and types of play activities engaged in from ages of 8½ to 15½.
- Maryland. State board of education.** Are boys keeping pace with girls in high-school education? In Fifty-eighth annual report, 1924. p. 40.
- County average shows ratio of 76 boys to every 100 girls. Chart illustrates ratio by counties. Boys gaining in some counties.
- Progress in reduction of number of over-age pupils in Maryland counties, 1922-23. Baltimore, Md. [1922] 34 p. tables. 4. (Mimeograph.),
- In 1922, 35.5 per cent of all white elementary school pupils were over age; in 1923, 32.8 per cent. Details for counties and for schools of different size given.
- National education association. Research division.** What are the weak spots in our public school system? [and other articles] Research bulletin of the National education association, September 1923.
- Does attendance vary with different kinds of schools and age of children? Statistics from several State systems. Conclusions indicate better schools get the best attendance.
- Odell, C. W.** A few data concerning the comparative efficiency of one-room and two- to four-room rural schools. *School and society*, 19: 530-532, May 1924.
- All rural schools in two counties in Illinois included in study. One-room schools had 3,434 pupils; two to four-room 575 pupils. Efficiency measured had to do with progress, retardation, and holding power. No difference in average progress of pupils. More elimination in one-room schools.
- Beavia, George Harve.** Factors controlling attendance in rural schools. New York, Teachers college, Columbia university, 1920. 69 p. forms. 8. (Teachers college, Columbia university. Contributions to education, no. 108.)
- As the result of a study of data in five Maryland counties it was concluded that the following factors were particularly significant in attendance: Distance to the school; whether pupil was behind or ahead of his grade; whether he stood high or low in his class; the teacher's qualifications; and the educational interest of the community. Partial correlations were used in handling the data.
- Rucker, Elizabeth K.** Retardation in the rural schools of Dorchester county. *Journal of rural education*, 4: 205-213, January 1925.
- Causes of retardation in 22 one-room rural schools in Dorchester county, Md. Age-grade tables compared with national standard age. Per cent repeating. Comparative tables of paragraph meaning, word meaning, and arithmetic reasoning. Not mental defect but inadequate instruction.
- Selke, George A.** The causes of absence in the rural schools of Crow Wing county, Minnesota. *Journal of rural education*, 5: 299-304, March-April, 1926.
- Data show that the chief causes of absences are illness, work, indifference of parents, and inclement weather.
- Tennant, J. L.** Improving high-school opportunities for farm boys and girls. *Journal of rural education*, 5: 242-252, January-February 1926.

An analysis of present status of high-school education in rural communities; causes of the present situation; opinions concerning kinds of high schools desirable for rural children; and means by which secondary schools are being made available in the rural areas.

Valentine, T. W. Retardation in short-term schools. North Carolina teacher, 1: 170-171, 180-181, February 1923.

In the grammar grades of North Carolina 4,474 white pupils were studied in 1923-24 to see whether or not there is a definite relation between length of school year and amount of retardation. The data show that the average retardation in schools of nine months was 1.0 year; of eight months, 1.4 years; of over six months and under eight, 1.9 years; of less than six months, 1.9 years.

COMPARATIVE EDUCATION

Ashby, A. W. and Byles, P. G. Rural education. Oxford university press, 1920.

A survey of rural education in Oxfordshire, England, and a critical analysis of the same with recommendations for improvement.

Fugh, Paul C. Reconstruction of the Chinese rural elementary school curriculum to meet rural needs in China. 346 p. 8°. Doctor's thesis, Graduate school, Cornell university, June 1924.

History and recent movements for reconstruction of curricula. Alma, criteria for judging and evaluation of curricula. Health teaching emphasized. New spirit for rural education needed. Leadership, training of teachers, better supervision, and more surveys, also important.

Osias, Camilo. Barrio-life and barrio education. Yonkers-on-Hudson, N. Y., World book co., 1921. ix, 175. 8°.

A survey which discusses the condition of the small school in the Philippines and presents its importance in Philippine education. Gives the number of these schools, enrollment, curriculum, administration, supervision, etc. Barrio schools must tend toward the practical and maintain cultural values as well because of their importance.

Osuna, John Joseph. Education in Porto Rico. New York, Teachers college, Columbia university, 1923. 312 p. fold., map, illus., diagr. (Contributions to education. Doctor's dissertation no. 133.)

Tabulates the actual conditions and points out the needs of the schools of Porto Rico. Discusses Spanish school histories and makes observations of Spanish schools (for the background). "The problem of education in Porto Rico is a problem of rural education." Says that more and wider use of educational centers (school buildings) as community centers will educate the people to the needs of education.

Russel, Wm. F. Schools in Bulgaria, with special reference to the influence of the Agrarian party on elementary and secondary education. New York, Teachers college, Columbia university, 1924. 101 p. 8°.

Gives a careful picture of the Bulgarian schools as influenced by the "farm bloc." Emphasizes the elementary and secondary schools. A thorough description of the school status in Bulgaria historically, socially, and economically. The administrative machinery of schools in Bulgaria tends towards centralization. Educational methods are not so advanced as in America. Every Bulgarian youth between 18 and 30 is compelled to give eight months' service to Bulgaria.

CURRICULUM

Brim, Orville G. Rural school survey of New York State: elementary rural school curriculum. Philadelphia, William F. Fell co., 1923. 102 p. 12°.

Curriculum examined in three ways: In its printed form; with reference to the use made of it by educators; and as to the actual curriculum made available to rural pupils from day to day. Does not meet needs. Tables. New curriculum with suggestions for improvement recommended.

Conover, L. Lenore. Nature study in rural and city third grades. *Journal of rural education*, 3: 30-34.

A study which shows that "two years of training or guidance in primary grades has placed children on a level with the students who have passed through 12 or more grades of city schools."

Dunn, Fannie W. A rural curriculum: an outstanding need in rural schools. Washington, D. C., Government printing office, 1926. 4 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 40, February 1926.)

Fitzmorris, R. S. Curriculum for the consolidated school. Master's thesis, Colorado State teachers college, 1922.

To show that the aims of education are not being fully carried out in the curriculum of the consolidated school. Aims past and present studied in connection with rural school programs. Recommends 6-3-3 plan and definitely established aims.

Freeman, Chester P. Adaptation of agriculture subject matter to the needs of country life. Thesis, George Peabody college for teachers, 1922.

To ascertain what the teachers of vocational agriculture schools are doing to get acquainted with needs of community and how common material is being used to aid in teaching. Questionnaire sent to schools receiving Federal aid in Alabama, Arkansas, Kentucky, Louisiana, and Mississippi. "In general, it may be said that all the teachers are attempting to adapt subject material to community needs."

Maryland. State department of education. Arithmetic goals. 68 p. Maryland school bulletin, vol. 7, no. 3, October 1925.

A study of the arithmetical needs of children in the elementary schools, with suggestions for testing and corrective work.

Orleans, Jacob S. and Richards, Edwin B. English in the rural and village schools of New York State. Albany, N. Y., University of the State of New York press, 1920. 35 p. tables. diagrs. (University of the State of New York. Bulletin no. 846, February 15, 1926.)

Children to the number of 55,356 tested as to ability to correct errors in English, to use correctly certain common misused expressions, and to write structurally correct sentences. Tests also given in literature information and grammar recognition.

Osburn, W. J. and Balliet, R. E. English vocabulary work among immigrant children. *Journal of rural education*, 4: 262-268.

To determine a suitable list of words to include in a vocabulary curriculum for first grade foreign speaking children. Actual experiment carried on in rural schools of Sturgeon Bay, Wis.; 162 of the 200 words obtained found in Jones and Thorndike word lists.

Reinoehl, Charles M. Analytic survey of State courses for rural elementary schools. Washington, D. C., Government printing office, 1922. 116 p. 8°. (U. S. Bureau of education. Bulletin, 1922, no. 42.)

This study aims to discover practice and trends in State courses of study. An analysis of State courses of study for rural elementary schools of 45 States was made. Aims, subject matter, materials, etc., as recommended are set forth in tabular form.

Reynolds, Annie. Characteristic features of recent superior State courses of study. Washington, D. C., Government printing office, 1926. 13 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 41, April 1926.)

Shinn, E. H. Elementary agriculture in rural schools from sixth to eighth grades. *Journal of rural education*, 4: 59-69, October 1924.

Aims and objectives in teaching agriculture in rural schools. Reorganization necessary, special trained teacher, cooperation among agencies interested. Many States making better provision. Recommendations based on questionnaire.

Windes, Ernest E. Objectives in elementary rural school agriculture. Washington, D. C., Government printing office, 1923. 18 p. 8". (U. S. Bureau of education. Rural school leaflet no. 11, March 1923.)

A statement of the place of agriculture in the school curriculum.

Works, G. A. Agricultural education. Advance sheets from biennial survey, 1922-1924. Washington, D. C., Government printing office, 1925. 11 p. 8". (U. S. Bureau of education. Bulletin, 1925, no. 32.)

Study of the situation concerning the teaching of agriculture in elementary schools, secondary schools, and collegiate institutions for the biennial period 1922-1924. States objectives in teaching of elementary agriculture as set forth in recent literature on the subject by authorities representing two different schools of thought, and treats of practice as influenced by interpretations of objectives set forth. Treats of teaching of agriculture in elementary schools through boys' and girls' club work as well as in schools. Sets forth evidence of increased interest in the objectives for the teaching of agriculture in all types of schools.

Wright, W. J. Junior extension work as developed through the public schools. Journal of rural education, 2: 207-212.

Conclusion: "The public school system, properly organized, provides the machinery and equipment necessary for effectively conducted junior extension work among boys and girls in school."

EDUCATIONAL THEORY

Ashbaugh, E. J. Value and significance of research in rural education. Journal of rural education, 3: 449-455.

Gives illustrations from such fields as pupil progress, teachers, curriculum, buildings, and finance as to what has been done in rural school research.

Barnes, Walter. Rural schools and national leadership. West Virginia school Journal, 53: 130, January 1925.

From an analysis of data in "Who's who" the conclusion is drawn that while the rural sections produced 233 notable men and women for each 1,000,000 living there the urban sections produced 1,550.

Brim, Orville G. Handicaps of the rural child. Journal of rural education, 2: 52-63.

A stimulating critique of existing conditions. Numerous data are presented and analyzed showing the nature of the "handicaps of the rural child."

— Rural education. New York, Macmillan co., 1923. xi, 302 p. 12".

Survey of proposed objectives for rural elementary education. Wide difference of purposes found. Analysis of rural environment made in order to determine needs. Program suggested for curriculum, method, and organization of rural schools.

— The rural elementary school in its community relations. Journal of rural education, 2: 441-449.

Analyzes the large problems of community development; shows the importance of specialized types of service; and suggests the function of the school in getting development.

Burnham, Ernest. Resources in rural education. Journal of rural education, 1: 433-440. (See also Journal of New York State teachers' association, 9: 141-147, June 1922.)

President's address, Department of rural education, National education association, Chicago, 1922.

Butterfield, Kenyon L. The education of the rural people. *Journal of rural education*, 2: 166-174.

President's address, American country life association, November, 1922.

Butterworth, Julian E. Educational resources of country life. *Journal of rural education*, 4: 6-13.

Presents five types of resources and shows what they may contribute to better education in the country.

Carney, Mabel. Community relations of rural schools. *Journal of rural education*, 2: 385-392.

An analysis of principles governing the function of the school in the rural community.

— The legitimate community relations and activities of rural schools. *Journal of rural education*, 2: 385-392, May 1923.

The responsibility of the rural elementary school in education of children. Community functions, by cooperation with other organizations, too great for any one agency.

Clark, Frances H. Junior club activities in the public elementary schools. *Journal of rural education*, 1: 80-83, October 1921.

Data obtained from several counties in Maryland. Not satisfactory when correlated with academic subjects. Case study cited. Extension service project failed. Teacher's school exhibit successful.

Dunn, Fannie W. The rural school's purpose in relation to the community. *Journal of rural education*, 1: 368-373.

A consideration of the community's purpose in maintaining schools, adult education, community service, and the schoolhouse as a community center.

Galpin, C. J. Can the farm family afford modern institutions? *Journal of rural education*, 3: 145-154.

Farm value per capita of rural population in 1920 was \$2,464. In cities per capita wealth was \$1,271.15 for cities studied. City income in 1921 was \$716 and farm income was \$417 per person. Cities spend nearly 50 per cent of their total budget for schools, libraries, health, and recreation.

Hurvey, Marie Turner. The Porter school: a new vision of the rural school in country life. *Journal of rural education*, 3: 305-311.

A description of the development of an exceptional school in Missouri.

Jensen, A. S. Rural opinion of educational philosophy. *Journal of rural education*, 5: 127-134, November 1925.

Results of an inquiry sent to farm and educational groups in Washington as to relative importance of five different functions of rural education; 79.0 per cent place first the function of developing a broad citizenship while only 1.8 per cent place first the "stay on the farm" idea. There is little difference between the judgments of farm and educational people.

Kirkman, Mrs. Ina H. A rural school experiment in self-government. *Journal of rural education*, 2: 25-29.

A detailed account of a successful experiment.

Kolb, J. H. Rural primary groups. A study of agricultural neighborhoods. University of Wisconsin. Research bulletin 51, 1921. 81 p. illus., diagrs., maps. 8°.

A study to determine what constitutes a rural primary group in Wisconsin. Many communities studied, mapped, and analyzed. Any scheme of organization in rural districts must recognize such groups.

— Service institutions for town and country. University of Wisconsin. Research bulletin 66.

The purpose of the study was to develop the relationship between town and country and point out need for recognizing this relationship in planning any rural organization. Some such organizations suggested and social service of institutions in light of suggested organizations.

Taylor, Carl C. The rural press as an educational agency. *Journal of rural education*, 28: 112-118, October, November 1922.

Agricultural journals, rural organization periodicals, and country weeklies. Subject material compared with agricultural college curricula. Journals led colleges 5-15 years in making transitions and additions in subject materials. Analysis of space given to farm subjects. Importance of press emphasized.

Works, George A. Outstanding needs of rural life today. In *National education association. Addresses and proceedings, 1922*, p. 225-229.

Emphasizes economic problems of rural education. Presents data showing that there has not been an actual decline in rural population. Gives some of the causes for the rate of growth in rural population not keeping up with the rate of growth in urban population.

HISTORICAL

Bethea, Power W. A decade of school progress. University of South Carolina. Bulletin no. 107, September 1925. 82 p. 8°.

A study to determine what progress has been made in public schools of South Carolina during the last 10 years. Records used mainly as source material for different counties. A summary of 25 items listed. Progress noted, but South Carolina ranks next to lowest and hence needs more effort towards school progress.

Dadisman, A. J. French creek as a rural community. College of agriculture, West Virginia university, Morgantown. Bulletin 176, June 1921.

Very careful community survey with section on "development of schools."

Hoag, Emily F. The national influence of a single farm community. Washington, D. C., Government printing office, 1921. (U. S. Department of agriculture. Bulletin no. 984, December 1, 1921.)

Special attention given to Union academy and its influence.

Mardis, S. K. The evolution of the school districts of Ohio. *Ohio teacher*, 42: 204-207, January 1922.

A brief sketch of (1) the evolution of the city school district from the little one-room, one-teacher school of colonial times to its present form—"the most perfect type of school administration yet invented"; (2) the evolution of the rural and village school district.

Dating from the allotment by the Government of "section 16" of each township for "school land," it took 107 years for the real township school district to develop; and dating from the admission of the State to the Union, 89 years. There was no rural-school system until the New school code of 1914 provided for rural supervision and required professional training. This code created the exempted village districts and the county school districts. Concludes that county school districts should be unified. Not a statistical study.

Stone, C. W. and others. Rural life and the rural school district. *American school board journal*, 67: 41-42. December 1923.

Study of changes in rural life, past 20 years in Whitman county, Wash. Potent social factors since formation of small school districts. Communication increased by changes. No need to sacrifice management of schools if districts are enlarged.

Tigert, John J. Recent educational progress in the United States. In *National education association. Addresses and proceedings, 1922* p. 373-378.

A review of educational advancement in the United States and a statement of needs. Statistics and facts of educational conditions compared with past years. Rural education has been advancing, as shown by improved systems. Still more needs in rural education.

SCHOOL SURVEYS

(See also Administration and Organization)

Classification of contributions under this heading should be interpreted broadly—as denoting emphasis rather than appraisal of the total content. Differentiations are not marked nor are those selected in all cases consistently followed owing to the wide scope of topics covered in surveys included and to the fact that placement was made by persons too widely separated in location for conference agreements.

ANNUAL AND BIENNIAL REPORTS

Much valuable statistical and other material may be found in each State school report. Only when this material has been organized about a specific problem has it been included in this bibliography. An illustration may be found under the heading "Administration and Organization: Pupils." Two references from Maryland are there reported which give data on two specific problems, namely: "Are boys keeping pace with girls in high-school education," and "Progress in reduction of over-age pupils in Maryland counties."

COMPARISONS (PUPILS, SCHOOLS, SYSTEMS)

Foote, John M. A comparative study of the age-grade data in Louisiana schools in 1920 and 1922. 16 p. tables, graphs. 8". (Louisiana teachers' association, January 1924.)

"This measurement of the changes in the age-grade status of the pupils in the schools makes clear the fact that the educational system is progressing rapidly in improving the unfavorable promotion rate, diminishing the over-age-ness, increasing the 'holding power,' and reducing the time the average pupil remains in a grade."

How Arkansas compares with other States. Journal of Arkansas education, 2: 18-22, December 1923.

A study of the relative rank of Arkansas in education, based on State reports and statistics from the U. S. Bureau of education. Ten tables show: That of 312,478 children between 7 and 13 years of age in the State in 1920, 50,000 had never attended school; that of 10,476 teaching positions in the State 5,215 were in one-room rural schools; that of the 10,476 teaching positions, 9,638 were filled by teachers who were not normal graduates; that Arkansas spent annually only \$23.83 per pupil enrolled (only Georgia and Tennessee spent smaller sums); that the median salary paid teachers in the 5,215 one-room schools was \$301; that the State ranked forty-sixth in national leadership, forty-sixth in earning power, and last in bank savings.

Keppel, Mark. Number 16 helps the elementary school. Sierra educational news, 18: 190-192, April 1922.

A short study, with two tables, to show advantages of California constitutional amendment 18 to elementary schools and especially to rural schools in that State. The sum of \$4,822,600.75 more was received under the new law which bases the apportionment on teachers allowed.

Murphy, Harold Edward. A study of rural and urban education in Walworth county, Wisconsin. M. S. thesis, University of Wisconsin, July 1925.

To show educational conditions in Walworth county and to suggest a plan for improvement. Data from approximately all rural schools were obtained. The smaller rural schools should be enlarged for economic and social reasons. Out of 42 of high school age in the one consolidated school district in Walworth county, 40 attend high school.

O'Brien, F. P. and Smart, T. J. Schooling in one-teacher schools. *Journal of rural education*, 1: 106-119, November 1921. (Also in *Bulletin of the University of Kansas*, 1921, vol. 22, no. 18.)

Results of instruction and educational facilities in some Kansas rural schools compared. Equal mental ability. Superiority of graded schools in building; library; playground facilities. Inferior instruction in one-teacher schools. Central elementary school possible without financial burden.

Olsen, Hans Christian. A study of educational equalities, being a survey of certain aspects of public education in Buffalo county, Nebraska. Kearney, Nebr., State industrial school press, 1921. 163 p., tables, diagrs., map. 8°. (Also in *Journal of rural education*, 1: 456-463, June 1922.)

A study to determine the educational opportunities provided by the different districts of the county (Buffalo) comparing costs thereof. Attendance, length of terms, teaching load, cost, equipment, and other items pertaining to the schools were studied. Much waste in supplying buildings for small numbers of pupils, inequality of opportunity, and poor machinery for administration.

ANALYTIC (RESULTS OF TESTING)

Altken survey. (Unpublished. Bound copies in University of Minnesota library) 1924 (?)

A survey of the educational facilities of Altken, Minn. The survey includes a detailed study of the school plant facilities, the school population, and the instruction. In the survey of instruction, a detailed diagnostic analysis is made and specific remedial measures are set forth in detail.

Brown, Gilbert L. Inequality of educational opportunity. *Journal of educational research*, 3: 195-200, March 1921.

A study of schools in a Michigan village. Pupils, teachers, buildings, equipment, and course of study analyzed. Comparative tables. Low standards in all respects pointed out.

Cavins, L. V. School survey of type counties of West Virginia. Survey made by State department of rural schools. Normal schools, colleges, and university. Charleston, W. Va., State department of schools [1923] 77 p. map, tables, charts, diagrs. 8°.

The survey included: Classification of pupils; a study of educational achievement as indicated by central tendencies; study of class instruction by means of measures of variability; studies in correlations; delivery of survey; study of rural and city schools; effect of supervision.

Colorado State teachers college. Report of the school survey and educational program, Fort Lupton, Colorado, 1924-25. vii+97 p. map, tables, illus. 8°. (Colorado State teachers college. Bulletin 25, no. 3, 1925.)

A survey of the Fort Lupton consolidated schools made by local teachers in extension survey classes to picture conditions in the school. Records and other means employed to make the study. Recommendations for improvement in administration, supervision, building, etc.

Fulk, Joseph B. and others. A study of the Alachua public schools, Alachua, Florida. Gainesville, Fla., 1925. 100 p. tables. 8°. (University of Florida teachers college. University record, vol. 20, no. 1, June, 1925.)

A study of the school system of this district as a classroom project and to set forth educational conditions to school patrons. Survey included visitations, observations, tests, and examination of records. A complete summary of findings is given, with comments and recommendations, including building, equipment, administration, curriculum, and supervision.

Georgia. Department of education. [Educational surveys of Lee, Miller, Laurens, Thomas, Johnson, Burke, Walker, Stephens, Dooley, Bacon, Grady, Wilkes, Seminole, Gwinnett, and Ware counties of Georgia] [Atlanta, Ga., Department of education, 1920-21, 1922-23] 8°. (Nos. 28-42.)

The surveys of Lee, Miller, Laurens, Thomas, Johnson, Burke, Walker, Stephens, Dooley, Bacon, Wilkes, and Grady counties are by M. L. Duggan and Euri Belle Bolton; Seminole, Ware, and Gwinnett counties, by M. L. Duggan and Sarah Mell Duggan.

These numbers are studies of educational situations in the Georgia counties named above, each separate number being a study of a single county. General surveys were made. These included studies of resources and geographical features as well as educational conditions. Suggestions for the improvement of administration and instruction were made by recommending better financial support, central administration, supervision, consolidation, etc.

Haggerty, M. E. Rural school survey of New York State: Educational achievement. Ithaca, N. Y., 1922. 223 p. tables, diagrs. 8°.

A complete record of the tests given in the survey of the rural schools of New York State. Results and recommendations. Includes reading, grouping of pupils, school progress, school organization, intelligence, history, spelling, arithmetic, algebra, and language.

Loomis, Burt W. and Duncan, Earle C. Survey of Gentry county public school. [Marysville, Mo., "Mace" print shops] 1922. 67 p. illus., maps, tables, graphs. 8°. (Missouri State teachers college. Bulletin vol. 10, no. 3, October 1922.)

Study of data relating to county schools and for their improvement. Tests given cooperatively with the college and county superintendent in each of the 82 schools of the county. Physical examinations given to pupils by county nurse. Pupils found to be one year retarded. Attendance poor in rural districts. Taxing system unequal. Many physical defects. Recommended changes to overcome these defects.

McCracken, Charles C. Logan county and Bellefontaine, Ohio, school survey. Columbus, Ohio, F. J. Heer printing co., 1923. 66 p. tables, diagrs. 8°.

A general educational survey of the schools of Logan county and recommendations for their improvement. Tests, age-grade tables, teacher training, and administrative machinery studied. Recommends more consolidation, special school for certain children in a county home, motor transportation, unified administration, and supervisory assistants.

Philippine Islands. Department of public instruction. Board of educational surveys. Paul Monroe, *chairman*. A survey of the educational system of the Philippine Islands. Manila, Bureau of printing, 1925. xviii, 677 p. 8°.

A comprehensive study and survey of education in the Philippine Islands was undertaken, in order that an adequate evaluation of the educational progress already made and information for guidance in the future might be obtained.

Philippine legislative enactment in 1924 provided for an educational survey. A survey staff of 23 persons, headed by Paul Monroe, visited schools, and achievement and educational tests to 32,000 pupils and 1,077 teachers. From these 223,710 examination records were obtained.

Philippine children remain in school a short time. Teachers are poorly trained. The average pupil acquires a second grade reading ability. Chapters close with recommendations in various phases of educational activities, covering problems of instruction, the curriculum, organization, and finance.

Tennant, J. L. and Davis, E. E. A study of rural schools in Runnels county, Texas. Austin, Tex., University of Texas, 1924. 95 p. illus., maps, diagrs. 8°. (University of Texas. Bulletin no. 2426, July 8, 1924.)

A study of the rural schools of Runnels county to set forth their condition to patrons and to educational workers in Texas. Visitations, tests, examination of

buildings and equipment, and various other means of collecting data used. More high-school opportunity needed, administrative reorganization to make larger schools possible, and financial revision recommended.

GENERAL

Arkansas. Public-school system of Arkansas. Part I. Digest of the general report. Washington, D. C., Government printing office, 1923. 8°. (U. S. Bureau of education. Bulletin, 1923, no. 10.)

A digest of the report of a survey made under the direction of the U. S. Commissioner of education at the request of the Arkansas State education commission. Includes a chapter on the rural schools of Arkansas, with recommendations for their improvement.

The Arkansas survey report. Journal of the Arkansas educational association, vol. 6; July-October, 1922, nos. 3-4. 83 p. 8°.

An abridged report of the Arkansas educational survey which includes such topics as climate, history, population, resources, and the educational system of Arkansas. The survey staff of 15 members, by visitation, examination of records, and other means, arrived at definite conclusions. Recommendations include better financing, teacher training, administration, and longer terms for rural schools.

Brogden, L. C. and others. Survey of the public schools of Lenoir county, North Carolina. Raleigh, N. C., 1924. 233 p. map, tables, illus. 8°. (Educational publication no. 73. Division of supervision, no. 17, 1924.)

A survey to determine conditions in Lenoir county, N. C., in order that a reorganization program may be inaugurated. Visitation, study of present method of instruction and buildings, and tests were given. A summary of findings is made and recommendations for improvements in teacher training, instruction, administration, buildings, and finance.

Burkholder, A. C. The schools of Caldwell county, Texas. San Marcos, Tex., Southwest Texas State teachers college [1923] 33 p. illus., diagrs. 8°. (Southwest Texas State teachers college. Bulletin, vol. 13, no. 3, October, 1923.)

A study of the educational conditions in Caldwell county, Tex., to present the results to patrons with suggestions for improvements. County school records, visitations and questionnaires furnished sources of material. District administration, as found, causes inequalities in financial support, etc. Meager library facilities, poor attendance, short terms, lack of close supervision, etc., call for improvement along these lines.

Burnham, Ernest. A county study in rural education. Kalamazoo, Mich., Western State normal school [1925] 89 p. tables, diagrs. 12°. (Western State normal school. Bulletin, vol. 21, no. 2 B.)

An analytical study of the social and educational conditions of Kalamazoo county, with the view of setting forth the needs of the rural and village schools. Financial data tabulated, educational tests given, pupil attendance, age and grade distribution studied. More extensive educational facilities, extension education, and administrative improvements are recommended.

Carmichael, Harry E. Educational survey of the schools of Clay district, Marshall county, West Virginia. [Moundsville, W. Va., 1922] 43 p. tables, chart. 8°.

A study of the educational conditions in Clay district, Marshall county, W. Va., made to arouse public opinion to need for improvement. Historical description, the teachers and their work, the use and result of standard tests. Comparisons were made with other schools of West Virginia. Short terms, poor attendance, physical defects in pupils, pupils 3½ years over age. Recommends administrative program raising standards of teachers, improving supervision, longer terms, and better roads.

Clemson agricultural college of South Carolina. Agricultural department. Public school survey of Oconee county, South Carolina. Made by the Division of education, the Clemson agricultural college in cooperation with the county board of education, Oconee county, June 1923. [Greenville, S. C., 1923] xix, 283 p. map, diagr. 8°.

A study of the county schools and presentation of findings to patrons. Observations, questionnaires, and general survey of the schools were made. Improvement noted, but recommendations for greater improvement in teacher training, attendance, equipment, and supervision are made.

Cook, Katherine M. Rural education. Advance sheets from biennial survey, 1920-1922. Washington, D. C., Government printing office, 1923. 35 p. 8° (U. S. Bureau of education. Bulletin, 1923, no. 36.)

A survey of progress made during the biennial period 1920-1922 in movements affecting rural education in the 48 States. Treats such topics as school support, the teaching staff, supervision of rural schools, centralization in administrative organization, and tendencies in secondary education.

— Constructive tendencies in rural education. Advance sheets from biennial survey, 1922-1924. Washington, D. C., Government printing office, 1925. 27 p. 8° (U. S. Bureau of education. Bulletin, 1925, no. 25.)

A survey of rural education in the 48 States during the biennial period 1922-1924. Discusses school support, the teaching staff, supervision of rural schools, centralization in administrative organization, tendencies in secondary education, etc.

Davis, E. E. and others. A study of rural schools in Wichita county (Texas). Austin, Tex., University of Texas, 1922. 60 p. diagrs. 8° (University of Texas. Bulletin no. 2243, November 15, 1922.)

A study of the rural schools of Wichita county, with view of helping patrons to improve them and to add concrete material to content of courses in rural education in Texas normal schools. Complete surveys of social, physical, and educational conditions included. Tests and questionnaires used. Administrative machinery, provision for supervision, and teacher qualification were found to be poor, and recommendations for their improvement were made.

Fulk, Joseph R. A study of the smaller elementary schools of Florida. University of Florida teachers college. University record, vol. 18, no. 4, February 1924. v, 74 p. tables. 8°.

A study of significant facts concerning the elementary schools of Florida. Data from county superintendents and principals through questionnaires covering the general character of the schools, the principal and his supervision, the teachers, and the pupils. Eight months term was the usual length of school year. Absence of industrial art in curricula noticeable. Required subjects crowd out electives. Recommendations for departmental work, cooperation between homes and school, better supervision, improved promotional plan, and better organization.

General education board. Public education in Indiana. Report of the Indiana education survey commission prepared under the direction of the commission by the General education board. New York, General education board, 1923. 307 p. tables, diagrs., front., plates. 8°.

An investigation of the entire educational system of Indiana with view of standardizing, unifying, correlating, and simplifying the existing educational system. Tests were given. Pupil distribution in school, finance, buildings, and organizations were studied. Rural schools are poorly organized and managed. Teacher training is inadequate; and equality of opportunity is lacking.

— Public education in Kentucky; a report by the Kentucky educational commission, prepared under the direction of the commission, by the General education board. New York, General education board, 1921. ix, 213 p. plates, tables, diagrs. 8°.

A study of the status of the Kentucky public schools to present recommendations for improvement. A general survey made in accordance with law. Standard tests, visitation, and questionnaires were used. Teacher training, finance, gen-

eral conditions, and administration studied. Recommends better teacher training, improved rural school buildings, administrative machinery, closer supervision, and other improvements.

Public education in North Carolina: a report of the State educational commission of North Carolina, prepared under the direction of the commission by the General education board. New York, General education board, 1921. xiv, 137 p. tables, diagrs., plates, 8°. (Also published as bulletin of General education board.)

A complete survey of the educational system of North Carolina to recommend program of improvement to general assembly 1921. Finance, administration, and general condition of education studied, using tests, questionnaires, and reports. Recommends changes in State, city, and county administration, teacher training program, high-school facilities, and financial support.

Howard, George, Jr. and Lohr, Lawrence L. A county-wide plan for the organization of the schools of Lincoln county, North Carolina. Approved by the State board for county-wide planning. Raleigh, N. C., 1923. 64 p. tables, maps, 8°. (State superintendent of public instruction. Educational publication no. 71. Division of school organization no. 1.)

A survey of conditions with particular reference to the reorganization of the schools of the county.

Manuel, Herachel T. and others. The Surface Creek survey. An educational survey of school districts 6, 9, 18, 22, 23, and 24, Delta county, Colorado. 1924. 127 p. tables, map, 8°.

Survey made to portray outstanding conditions of the community and of the schools and to suggest improvements. Visitations, records, tests, and comparisons were used. Consolidation with closer supervision; better trained teachers; revision of curricula to better meet local needs; more financial support; and cooperation with patrons recommended.

Michigan. Department of public instruction. Rural education in Michigan. Prepared by Wilford L. Coffey . . . and John M. Munson. [Lansing, Mich.] Superintendent of public instruction, 1921. 50 p. illus., maps, diagrs. 8°. (Bulletin no. 32.)

Data for 1920 regarding such matters as training and certification of rural teachers, percentage pupils passing eighth grade examinations, growth of standard schools, and taxable valuations per child of school age.

Missouri. Department of public schools. Missouri school survey report. Facts concerning public education in Missouri. Supplement to the 75th report of the public schools of the State of Missouri, school year ending June 30, 1924. Jefferson City, Mo., Department of public schools [1924] 139 p. 8°. (See also "School and community," Missouri teachers journal, 11:14-18, January 1925.)

Survey made to collect and organize significant facts regarding important educational problems confronting Missouri and to present these to the people for their guidance in solving their educational problems. Includes school support, administration and supervision, and certification of teachers and comparisons. Valuations vary from \$1,533 to \$108,537 per child in different districts within one county of the State. More State support needed; consolidation, better trained teachers, and closer supervision recommended.

New Jersey. Hanover township. Board of education. A school survey of Hanover township, Morris county, New Jersey. Elizabeth Hooker surveyor . . . Morris Plains, N. J., Board of education of Hanover township [1923] 72 p. illus., maps, diagrs. 8°.

A careful investigation of the schools of Hanover township, N. J., with view of offering suggestions for school improvement. Educational survey included collecting statistics, giving tests, observations, questionnaires, and comparisons. Present system was found to be excellent, but curriculum, publicity, consolidation, attendance, and other problems of administration need development.

New York. Rural school survey of New York State: administration and supervision. By Charles H. Judd *and others*. Ithaca, N. Y., 1923. 620 p. tables, diagrs. 8°.

This volume contains such subjects as the common school district; medical inspection; principles of organization and administration; the State system of examination; the community; general summary and recommendations.

— Rural school survey of New York State. A report to the rural school patrons, by the Joint committee on rural schools, George A. Works, chairman. Ithaca, N. Y., 1922. 272 p. tables, diagrs. 8°.

Summary of recommendations; work of the joint committee; organization of the survey; the rural school teachers; curriculum of the elementary rural school; the rural high school; the New York State system of examinations as related to the rural school; rural school buildings; the educational product; further evidence on the work of the schools; community relations; administration and supervision; school support; reactions of rural school patrons; appendix.

— Rural school survey of New York State: The teaching personnel; the elementary curriculum; community relations. By W. C. Bagley, Orville G. Brim, and Mabel Carney. Ithaca, N. Y., 1923. 270 p., tables, diagrs. 8°.

This volume is in three parts. Part I treats of the teaching force in the rural schools: Age, sex, experience, nativity, teacherages, salaries, qualifications, and other factors relative to the instructional problem are tabulated and summarized. Part II treats of general principles of curriculum construction and conditions in New York rural schools. Part III contains a survey and interpretation of the community situation as found in New York rural schools.

Ohio. Department of education. A study of rural school conditions in Ohio, issued by the Superintendent of public instruction. Columbus, Ohio, The F. J. Heer printing co., 1920. 175 p. illus., diagrs. 8°. (Rural school bulletin.)

This is a study of the one-room school, its legislative history in Ohio, supervision, centralization and consolidation, community activities and extension work, the rural high school, and the county normal school.

Pittman, M. S. and others. A rural school survey of Oakland county, Michigan. Ypsilanti, Mich., 1923. 64 p. tables, graphs. 8°. (Michigan State normal college. Department of College extension. Bulletin no. 1, 1923.)

A study to determine school facilities and character of school work done by elementary pupils of Oakland county, Mich., and to make recommendations therefrom; 176 rural schools and 8 villages were tested. It was found that village pupils generally rank ahead of rural. Equipment poor in some schools. Teachers young and poorly trained. More planning for year's work needed.

Rhode Island. State board of education. Report of committee on survey of Little Compton and Richmond public schools. 1924.

Visitations and records of the schools were used in making the surveys. Recommendations were made for improved lighting, heating and other construction arrangements. New high school location and building needed. Consolidation needed in certain sections making larger units.

Summary of some points of the Indiana rural schools survey. Educator-Journal, 21: 140-141.

Summary of some points of the Indiana rural school survey. Certain headings selected as found by the survey with statistics for same. Records show physical conditions of buildings, length of term, and complete data for various items selected.

Swansea, Mass. School committee. A survey of the schools of Swansea, Massachusetts, June 1921. Survey staff: Alexander J. Inglis, of Harvard university; Superintendent Oliver H. Toothaker; A. Emanuel Ekstrom,

Brown university. Swansea, Mass., School committee, 1920. 43 p. tables, charts. 8°.

A survey of the problem of school accommodations throughout the town to determine the educational conditions and point out the needs. Observations made, records studied, age-grade table made, and geographical features considered. Inadequate buildings, per capita high-school cost high, one-room schools offer poor service to pupils. Recommends consolidation and better instruction.

Swift, F. H. Public-school system of Arkansas. Part 2. Public school finance. Washington, D. C., Government printing office, 1923. 8° (U. S. Bureau of education. Bulletin, 1923, no. 11.)

A study concerned largely with equalizing educational opportunities and promoting better rural schools.

Thomason, John F. School survey of York county [South Carolina]. Rock Hill, S. C., 1920. 87 p. 8°. (Winthrop college. Bulletin no. 1, vol. 14, September 1920.)

A survey made to present the salient facts of the York county schools and to direct attention to needed improvements. Industries were analyzed, school buildings, school finance, administration, and supervision were surveyed. Principal recommendations were for administrative improvements.

Threadgould, Francis A. A survey of rural schools in Michigan. American schoolmaster, 15: 228-230, June 1922.

This survey presents data relative to school efficiency and community social activities as reported in questionnaire replies from 42 representative teachers of one-room schools in Michigan. Shows that the ordinary teacher teaches about seven grades, hears nearly 30 recitations per day, and has an enrollment of only 21 pupils; that grammar and civil government are the subjects most poorly taught; and that there is a startling lack of rural social life. Concludes that a larger unit than the district is necessary for better instruction and for community social organization.

Tupper, C. Ralph. A survey of the Arizona public-school system. [Phoenix, Ariz.] Gazette job printing co., 1925. 112 p. 8°. (See also Arizona teacher and home journal, for February, March, April, May, and June 1925.)

A survey of the educational conditions in Arizona over the period 1915-1925 to secure recent data as a basis for formulating legislation. Survey takes into account social and topographical conditions in the State. Records and tests were used in examining pupils and in studying administration and teacher qualification. Arizona is able to support good schools; she has the buildings and equipment; teachers measure up favorably with other States. Attendance is poor. State department inadequate. County educational office needs reorganization.

United States. Bureau of education. Public education in Oklahoma. [Oklahoma City, Department of education of Oklahoma, 1922.] 70 p. 8°.

Report of a survey made at the request of the Oklahoma State educational survey commission, under the direction of the U. S. Commissioner of education. A digest of the report. The survey staff of 23 members made a complete educational survey of Oklahoma schools and recommendations for improvements. Recommendations cover problems of administration, finance, organization, instruction, and curriculum.

Survey of the schools of Brunswick and of Glynn county, Georgia. Washington, D. C., Government printing office, 1920. 82 p. 8°. (Bulletin, 1920, no. 27.)

The object of the study is to improve the educational conditions in the city and county, both of which are under one administrative board. A study was made of organization, administration, finance, buildings, courses of study, methods of teaching, etc., in the school system. Recommendations for improvement are set forth.

University of Tennessee. Division of university extension. Survey of Crockett county, Tennessee. By B. O. Duggan and others. Knoxville, Tenn., University of Tennessee press, 1924. 31 p. 8°. (University of Tennessee. Extension series, vol. 1, no. 3.)

A survey of the schools and of the agricultural, economic, and social conditions with suggestions for curricular revision and community improvement. Agriculture is leading occupation; children are retarded. Larger school units and more practical courses in agriculture recommended.

Survey of Union county, Tennessee. By B. O. Duggan and others. Knoxville, Tenn., University of Tennessee press, 1924. 48 p. 8°. (University of Tennessee. Extension series, vol. 1, no. 2.)

A survey of the schools and of the agricultural, economic, and social conditions of Union county, with suggestions for curricular revision and community improvement. Recommendations for administrative reorganization, better equipment, curricular enrichment adapted to local needs, and extra-curricular activities involving social improvement.

Virginia education commission and Virginia survey staff. Virginia public schools. A survey of a Southern State public-school system. Parts 1 and 2. Yonkers-on-Hudson, N. Y., World book co., 1920, 1921. 8°.

Part 1. Reports of education commission and survey staff. Part 2. Educational tests.

A careful study of school conditions in Virginia made in accordance with legislative enactment as a basis for report and recommendations to the assembly of 1920. Complete surveys were made of the entire school system of Virginia, including the study of administrative machinery, organization, teaching staff, records, and the giving of tests. Administrative changes, providing for county unit and consolidation, better buildings, and better trained teachers recommended.

Wisconsin State teachers' association. Building survey committee. Report on rural school survey. Madison, Wis., 1925. 37 p. illus., tables. 8°. (Bulletin, November 1925.)

A study of rural school buildings in four Wisconsin counties. Score card used in measuring buildings. Scores show low averages for rural schools.

Works, George A. Summary of Texas school survey report. Texas outlook, 9: 26-37, May 1925; 18-26, June 1925; 17-20, July 1925; 15-20, August 1925; 32-44, September 1925.

A good summary of the work done by the survey, with a review of the findings.

Texas educational survey report. Austin, Tex., 1925. 256 p. illus., maps, diagrs. 8°. (Texas educational survey commission. General report, vol. 8.)

A complete educational survey of the Texas school system with specific recommendations, including problems of administration, organization, instruction, and curriculum.

Wright, Edgar E. and Whitney, Frederick L. A survey of the Rustad consolidated school. Moorhead, Minn., 1923. 31 p. tables, diagrs. 8°. (Moorhead State teachers college. Bulletin, series 19, no. 2, July 1923.)

A report of the study of a typical school situation in the Red River Valley. Includes a study of the physical features of the district and exhaustive industrial, social, and educational surveys. Entire district governed by a town board; town meetings held; no illiteracy in district; progressive educational policy maintained; little supervision; pupils retarded. Other findings.

Wyoming. Department of education. A survey of five school districts in Lincoln county. Cheyenne, Wy., 1922. 24 p. tables, illus. 8°. (Bulletin no. 6. Series B.)

Data on schools and equipment, curricula, school population, teachers, organization and administration, and finances.

SOCIAL, ECONOMIC, AND HEALTH

Davis, E. E. A study of rural schools in Williamson county (Texas). Austin, Tex., University of Texas, 1922. 53 p. diagrs., maps. 8". (University of Texas. Bulletin no. 2218, October 8, 1922.)

Social and industrial analyses. Better trained teachers, health supervisors, adequate teaching force with consolidation, etc., recommended.

— **and Adams, F. J.** A study of rural schools in Smith county, Texas. Austin, Tex., University of Texas press [1923] (University of Texas Bulletin no. 2, 339, October 15, 1923.)

A school survey made to determine what defects exist in the present system and what improvements may be suggested. Financial, industrial, social, and educational conditions are given. Enrollment, age-grade tables, and tests were used. Lower grades one year and upper grades two years retarded. Consolidation of small schools, better financial support, and administrative changes are recommended.

— **and Gray, C. T.** A study of rural schools in Karnes county (Texas). Austin, Tex., University of Texas, 1922. 68 p. diagrs. 8". (University of Texas. Bulletin no. 2246, December 8, 1922.)

Social and industrial analyses. Readjustment of school finance, closer supervision, and consolidation recommended.

Garnett, William Edward. Economic and social survey of Albemarle county, Virginia. Ph. D. thesis, University of Wisconsin, 1920.

The entire county was studied by the questionnaire method. A campaign was undertaken to arouse public sentiment in behalf of better public education. Change to the county unit system and enlargement of the powers of county board of education. Popular vote on: (a) a more adequate financial support of public education; (b) compulsory education; (c) a county agricultural high school; (d) regular medical inspection of school children. Furnish the county superintendent with needed assistants. Provisions for a county library system.

Hatcher, Mattie Louise and Mills, Eugenia Roemer. A sanitary survey of the school plants of rural Warren county, Kentucky. 1920. 78" p. tables. 8".

An analytical survey of the housing of pupils and teachers of Warren county, Ky. By the use of census reports, records, maps and personal observation, the county school buildings were carefully analyzed. Score cards were used in making recommendations. Needed improvements include building, pictures, decorations, other equipment, playground, and landscapes.

Heron, A. R. Constitutional amendment 16. . . . Sierra educational news, 19: 537-542, November 1923.

(1) Its meaning and accomplishment. (2) Graphic study of financial education. Statistics of California made over a term of years including years after adoption of Amendment No. 16. (3) Results show that it has increased the State share in school support, lengthened minimum terms, and increased teachers minimum salary.

McConnell, Robert Ervle. Rural education in Polk county, Wisconsin. M. S. thesis, University of Wisconsin, 1923.

The questionnaire method was used and data from various sources. Improvement has been taking place in the elementary school situation of Polk county. Much inequality of educational opportunity exists among the rural people. The school districts are very unequal as to area and valuation. The rural boys and girls show a desire to stay in the country. The graded school movement which has been making progress should continue. School districts, such as the high-school districts of Amery, Balsam Lake, Luck, St. Croix, and Osceola, should be enlarged. There is plenty of room for improvement through consolidation, transportation, and equalization of school districts as to size and taxable property.

Moore, R. C. Survey report. Illinois teacher, 14: 75-78, December 1925.

A survey provided for by law, made by the Department of public welfare of specially handicapped children in Illinois. It included children of all grades of school age three years retarded, delinquent children, and those handicapped by physical defects. Psychological, physical, and intelligence examinations were made of children in Alexander and Du Page counties. Among the findings were the following: The northern county was found to be in advance of the southern county in its attention to physical welfare of its children. Many physical defects discovered in children of both counties. Children whose parents had small incomes in greatest need of medical and surgical attention. Mental age lower for rural and negro schools. Recommendations for remedial measures made to legislature.

National education association. Research division. An American ideal, American schoolmaster, 16: 15-18, January 1923.

Inequality of educational opportunity in the United States is indicated by the following extremes: Average school session in New Jersey, 189 days; South Carolina, 109 days. In California 86 per cent of the teachers are normal graduates; in Florida 1 per cent. The average salary paid teachers of one-room schools in California is \$1,257; in Mississippi, \$328. Of 8,400 teachers in one-room schools in New York State, only 420 have had the generally accepted minimum preparation for elementary teachers.

New York. Rural school survey of New York State; financial support, by Harlan Updegraff. Ithaca, N. Y., 1922. 233 p. Incl. tables, diagrs. 12".

This volume treats of social and economic conditions of rural New York, the local administrative organization and procedure, expense, tax rates, and general financial problems of the schools. Suggests remedies through local adjustments, State support and its apportionment. A complete treatment.

Rural school survey of New York State; school buildings and grounds by Julian E. Butterworth. Ithaca, N. Y., 1922. 131 p. illus., maps, forms, plates, diagrs. 12".

Total scores for buildings of different size, together with data on important phases of a school building, are presented. A program of building improvement is outlined, emphasizing three factors: A more enlightened public opinion; higher and more definite minimum standards; and financial penalties and rewards.

Preston, Josephine Corliss. Rural health and sanitation. In National education association. Addresses and proceedings, 1923. p. 352.

A survey of the rural health and sanitation of the schools of the United States. Questionnaires sent to each county and State superintendent. Summaries show that very little had been done in rural education toward health teaching. Indications are that great advancement will soon be made toward making health and physical development a part of the regular rural school curriculum.

Reed, L. Bell. A local survey of educational conditions in San Miguel county, New Mexico. New Mexico journal of education, July 1920. p. 5-9.

A report of a survey of conditions and status of work of the truant officer and rural school supervisor of San Miguel county. Attendance poor, teachers poorly qualified, buildings meager, and equipment lacking. Need better teachers, consolidation, and more financial support.

Sanderson, Dwight and Thompson, Warren S. The social areas of Otsego county. Ithaca, N. Y., Cornell agricultural experiment station [1923] 39 p. tables, maps. 8".

Important section on "The community as a unit for school administration" with map showing "possible school communities."

Yoder, Fred Roy. The social aspects of farm tenancy in the United States. Ph. D. thesis, University of Wisconsin, 1923.

In order to ascertain the social conditions of communities having a high percentage of tenants, a social survey was made of a community in North Carolina, and other investigations were undertaken in tenant areas of North Carolina, Louis-

iana, Mississippi, Missouri, Illinois, Iowa, and Washington. In the South the educational status of white tenants is lower than the educational status of white owners, but in the Middle West there is little difference in the educational status of tenants and owners. A high per cent of white tenants in rural communities in the South interferes with rural school progress, but not in the rural communities of the upper Mississippi Valley. Children of tenant families lacking wealth and culture must depend on the rural schools to supply them with knowledge of a better standard of living and to train them to take their places as efficient producers.

STATISTICAL (EMPHASIZING STATISTICAL DATA)

Alabama. Department of education. Statistical study of education in Alabama from 1890 to 1921. [Montgomery, Alabama] State board of education, 1921. 55 p. diagrams, tables. 8°.

Comparative statistics showing growth of Alabama school system. Data tabulated from reports by decades. Shows past and present attendance, numbers of pupils in rural high schools and urban high schools, days attended in rural and urban schools, number of one and two-teacher schools, and administrative machinery for financing schools.

Benner, Thomas E. A comparative study of the elementary schools, white and colored, of the 67 counties of Alabama. Montgomery, Ala., State department of education, 1921. 14 p. 8°.

A statistical study of the elementary schools of Alabama made for the purpose of ranking the counties according to their educational facilities. Kind of school, ownership of buildings, term, percentage of attendance, grade mortality, literacy, teacher qualification, salary, equipment, and finance are the items used in determining the ranking of counties of the State.

Clapp, Frank L. and others. The public schools of Archuleta county, Colorado; a survey. 21 p. map, tables. 8°. (University of Colorado. Bulletin, vol. 20, no. 2. General series no. 151.)

Statistics reviewed, physical features of county, seasons, school finance, and educational organizations considered. Recommendations for gradual improvement in equipment, teachers' salaries, and buildings were made.

Cowart, R. W. A citizen's catechism of the public schools of Alabama. Montgomery, Ala., 1926. 48 p. tables, diagrs. 8°. (Alabama education association. Bulletin no. 3, January 1926.)

Data on a wide variety of educational conditions in Alabama.

— Length of school terms in rural Alabama. Alabama school journal, 43: 11, November 1925.

17.5 per cent of rural white children of Alabama are in schools, with terms of less than 100 days; 25.5 per cent in schools of 100 to 119 days; 20.2 per cent in schools of 120 to 139 days; 11.4 in schools of 140 to 159 days; and 25.4 per cent in schools of 160 to 180 days.

Gee, Wilson. The rural problem in Virginia. Virginia journal of education, 17: 223-226, February 1924.

An interpretation of statistics from the U. S. Bureau of the census, and from reports of the State superintendent of public instruction. Shows that 71 per cent of the population of Virginia is rural. Of the 6,387 school buildings reported for 1920-21, 2,455 were one-room white schools and 1,331 one-room negro schools. The percentage of one-room schools was reduced from 59 per cent in 1921 to 55 per cent in 1923. The average length of term in these one-room schools in 1923 was 121 days. The average salary for white teachers was \$413 and for colored teachers \$245.

Hosman, Everett M. Some facts about class 6 schools. Nebraska educational journal, 5: 206-208, May 1925.

Data regarding salaries and tenures in 264 Nebraska schools in places under 1,000 population.

Landsittel, F. C. Survey of educational conditions in Fairfield county, Ohio. Columbus, Ohio, The F. J. Hoyer printing co. 53 p. tables, map. (Issued by Vernon M. Riegel, superintendent of public instruction.)

School population and attendance; curriculum; buildings and grounds; the teacher and his work; supervision; financial support; reorganization.

McArthur, Gertrude. A study of the conditions of the rural schools in Peninsular Florida. Gainesville, Fla., University of Florida teachers college, 1922. 81 p. diagr., map. 8°. (University of Florida teachers college. University record, vol. 17, no. 4.)

This study was made in order that rural school conditions in Florida might be known and recommendations for needed improvements be made. Twenty-five counties of the peninsula included. Historical setting and growth of schools reviewed. Statistics of teacher training, enrollment, and finance from State and county records. Observations in all counties studied. Poor attendance; curricula lacking in local elements, pupil mortality high, teacher turnover too prevalent. Better supervision, teacher preparation, attendance, support, and cooperation needed. Consolidation with teachers' homes recommended.

Massachusetts. Department of education. Committee on problems of the one-teacher school in Massachusetts. Report (Frammingham conference), April 20, 1925. [Massachusetts, Department of education, 1925] 24 p. tables. (Mimeograph.)

Data on conditions in one-teacher schools in Massachusetts together with suggestions for improvement.

Minnesota. State department of education. Ungraded elementary (rural) schools. 1924-25. 7 p. (Mimeograph.)

A survey study giving length of term, attendance, number graduates, enrollment, age-grade distribution, and progress during past decade. Terms vary from 7 to 9 months. Average days attendance per pupil is 123. Four and six-tenths per cent of those enrolled complete eighth grade. Greatest number in fourth grade in three counties surveyed and greatest number were 9 years of age. Much progress in 10 years.

Missouri. State superintendent of public schools. Facts concerning public education in Missouri . . . Chapter 3. County school administration and supervision. Jefferson City, Mo. [1925] p. 42-60, tables. 8°.

A chapter from the report of the Missouri school survey. Data show (1) that the median teaching experience of the rural school teacher is 2.7 years; (2) that 45.9 per cent of the rural teachers had no normal school training, and 15.2 per cent had no high-school training; (3) that the median number of years tenure for rural teachers is 1.8 years; (4) that the middle per cent of the counties pay rural teachers annual salaries of between \$463.75 and \$665.63. One of the recommendations is that standards of certification should be as high for rural teachers as for city elementary school teachers, and equal compensation should be given for equal preparation and equal service.

New York (State) university. Survey of Livingston county schools. Albany, N. Y., University of the State of New York, 1922. 143 p. illus., tables, diagrs. 8°. (University of State of New York. Bulletin no. 738, July 1921.)

Recommendations made for improvement in financing schools, better building facilities and unified administration.

Pennsylvania. Department of public instruction. Educational surveys, appropriations, etc. Reports of committee appointed by . . . governor. Submitted March 1925. [Harrisburg, Pa., Telegraph printing co., 1925] xv, 398 p., tables, diagrs. 8°.

A study defining facts about buildings, pupils, teachers, community interests, administrative effectiveness, and school support. Statistics collected from 332 schools in 11 counties. Concludes that rural school districts are too small to function socially, economically or educationally. Recommends county unit, better qualified teachers, and more supervision.

Sears, Jesse Brundage and others. The Arlington school survey. A report of a study of the school systems of Arlington and three adjacent rural districts of Sibley county, Minnesota. Minneapolis, Minn., University of Minnesota, 1921. 58 p. tables, diagrs. 8°. (University of Minnesota. General extension division. Bulletin, vol. xxiv, no. 28.)

* A survey study of these schools for classroom laboratory purposes and to point out improvements to be made. Teacher qualification and pupil progress studied. Recommends complete reorganization, bringing the four schools under one system, with adequate building, equipment, and finance.

Summers, Alexander. Salaries of rural teachers and length of school term in 1924. Washington, D. C., Government printing office, 1926. 34 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 39.)

Sets forth results of a questionnaire study of salaries of rural teachers in five types of schools—one-teacher, two-teacher, three or more teacher, consolidated, and three or more teacher schools in villages and towns. Compares urban and rural salaries. Tabulates all data.

Wager, Ralph E. A critical study of some educational problems of the State of Georgia. Georgia State school items, 2: 1-107, February 1925.

Problems as revealed through a study of conditions in the various counties relating to valuations, tax rates, per pupil expenditures, length of term, and the like.

Washington. Public school administrative commission. Report. Olympia, Wash., 1921. 118 p., tables, diagrs. 8°.

Data regarding educational conditions in the State particularly in the rural areas.

Wilson county, N. C. Board of education. Public schools of Wilson county, North Carolina. By Charles L. Coon, superintendent of schools. Ten years, 1913-14 to 1923-24. Wilson, N. C., [1924?] 90 p. illus., maps, tables. 8°.

A historical account of the county schools during the above 10-year period. Data giving financial condition, size and shape of districts, buildings, equipment, teaching force, enrollment and attendance. Advancement during this decade is shown, but there is need for improvement along most of the foregoing lines at time of study.

Wisconsin teachers' association. Finance survey committee. Wisconsin rural school survey. Madison, Wis., 1916. 37 p. tables, graph. (Bulletin, June 1926.)

The present educational opportunity; school costs; sources of income for the public schools; taxable wealth supporting public education; findings of the report.

SUPERVISION

Anderson, C. J. and others. Wisconsin standards for supervising teachers for 1923-24. Journal of rural education, 3: 273-274, February 1924.

Legal qualifications: A State certificate, a first-grade county certificate, a second-grade county certificate, a certificate of graduation from a county training school or high school training department, and in addition at least three years of successful experience in teaching, at least one of which shall have been in rural schools. Qualifications endorsed by supervising teachers association 1921-22 and recommended by the State department.

For certification: One or more years of successful experience in supervision of instruction; two or more years of professional training beyond the high school; five years' experience of successful teaching, one of which shall have been in rural schools. A list of additional qualifications of supervisors thought by State supervisors to be essential.

Ayer, Adelaide M. What rural teachers think of group teachers' meetings. Journal of rural education, 1: 20-23, September 1921.

Questionnaire sent to 80 teachers in Montana. Sample given. Conclusion reached that majority welcome teachers' meetings.

Baer, Joseph A. How to raise the standards of county supervision through a research department. *Journal of rural education*, 4: 81-86, October 1924. Suggested studies that can be made by a research department as an aid to county supervision.

Baker, George M. Supervision in Fayette county, Kentucky. *American school board journal*, July 1923.

Tendency in the past for county superintendent without assistants to feel his duty done by making one perfunctory visit per year to each school in county.

Mr. Baker, after teaching supervision and administration for seven years, spent some time in the field as county superintendent. He visited every one of the 40 schools in the county during six months, the number of visits varying from 6 to 26 depending upon circumstances. About 75 per cent of his time devoted to visits. Each visit averaged about 15 minutes.

Burris, Benjamin J. Preliminary report on supervision in county demonstrations. Indianapolis, Ind., 1924. 37 p. tables. 8". (Indiana department of public instruction. Educational bulletin no. 74.)

The preliminary report of an extensive experiment subsidized by the General education board. Results show that "children in the counties with supervisors advanced, during the period between the two tests, 14.3 per cent faster than the children in the counties without supervisors." . . . "The two counties with supervisors, for an additional expenditure of \$14,021.24 for supervision, purchased the equivalent of 22.9 days of instruction for their children, which, at the current daily cost of instruction without supervision, has a value of \$38,559.48."

Cherry, Annie M. A year's work in supervision. *Journal of rural education*, 4: 14-23, September 1924.

The year's program in Halifax county, N. C., 1923-24, in the interest of bigger and better schools. Objectives for the year were as follows:

1. Increasing the quantity and quality of classroom instruction in every school in the county. By use of standard tests in a testing program grading, classification of pupils into superior, average, and low average groups. A new basis for measurement of progress.

2. Increasing the general teaching efficiency of the teaching force, through (1) a three days' conference; (2) group teachers' meetings; (3) personal visits and private interviews; (4) reading circle work; and (5) final general meeting.

3. Increasing the efficiency of the school as a whole through (1) better attendance; (2) school rivalry; (3) a definite health program.

4. Developing school and community cooperation through organized effort.

Cook, Katherine M. Improvement of instruction in rural schools through professional supervision. Washington, D. C., Government printing office, 1926. 54 p. 8". (U. S. Bureau of education. Bulletin, 1926, no. 12.)

A report of the proceedings of a supervisory conference held in Nashville, Tenn., in 1925. Includes a discussion of the meaning of supervision from standpoint of State and county; an equitable distribution of the supervisor's time; the rural elementary curriculum as affected by modern educational tendencies and as embodied in courses of study which meet the needs of rural teachers; and the value of, and technique to be employed in, analysis of the recitation, the demonstration lesson, testing programs, intelligent use of the textbook.

Supervision of rural schools. Washington, D. C., Government printing office, 1922. 111 p. 8". (U. S. Bureau of education. Bulletin, 1922, no. 10.)

Discusses the status of rural supervision in the United States. Investigation of laws relating to selection, salary, etc., of instructional supervisors in the different States, followed by a questionnaire study of the number of supervisors and type of supervision carried on. A brief discussion of methods in five States is given.

Rural supervision and the county superintendent. *American school board journal*, 60: 29-30, January 1920.

A summary of factors relating to qualifications of county superintendents, remuneration, and conditions permitting effective supervision. A consideration of units of administration and supervision.

Cook, Katherine M. Rural supervision in the United States. American school board journal, 60: 29-30, March 1920.

A continuation of a previous discussion. Topics include training teachers in service, the unit of administration, district and State administration, and the New England town.

Cook, Selda. Teachers' ideas of helpful supervision. Educational administration and supervision, 9: 554-557, December 1923.

Results of anonymous answers to questions turned in by 43 teachers and listed according to frequency.

1. Qualities considered by teachers most desirable in a supervisor. First five in order of frequency: Helpfulness, sympathy, executive ability, pleasant manner, and tact.

2. First five qualities in list considered objectionable in supervisor: Domineering, unjust criticism, partiality, destructive criticism, and insincerity.

3. First five forms of help that teachers thought a supervisor could render: Constructive criticism, demonstrations, conferences, teaching by supervisor, and respecting rights of teacher.

4. Almost equally divided as to question of voice in building management.

5. Suggested innovations for more helpful supervisor.

6. Suggested innovations tending toward more democratic building government.

Dakin, W. S. Training supervisors for rural schools. Journal of rural education, 3: 193-197, January 1924.

Approximately 300,000 rural teachers without supervision. Importance of supervision obvious. Supervisors should be trained by State. Training should include directed field work supplemented by professional reading and extension courses.

Davidson, Isobel. Rural school supervision as an agency for improving rural schools. Journal of rural education, 1: 3-12, September 1921.

Rural and city supervision contrasted. Supervisor to improve the teacher, her work, and the school. Works with other organizations in community. Still in pioneer stage.

Devera, Nancy Ora. A study of the distribution of a typical supervisor's time. Thesis, 1925, George Peabody college for teachers.

In order to determine how a typical rural school supervisor distributes her time to the various duties of supervision, 59 supervisors kept a daily record of their activities over a period of from 6 to 27 days. Supervisors give four days per week to supervision, the average work day is 7 hours and 48 minutes. Time distribution as follows: Supervision, 45 per cent; clerical work, 22 per cent; teachers' meetings, 7 per cent; non-instructional activities, 7 per cent; traveling, 19 per cent; total, 100 per cent.

Dunn, Fannia W. What is instructional supervision? Journal of rural education, 2: 248-254, February 1923.

An advisory study of instructional supervision as contrasted with administrative supervision. An investigation made of functions of supervisors and superintendents. Summary of the general consensus of opinion as to the function of a supervisor.

Edmonson, J. B. Preparation of Michigan superintendents in smaller systems. Moderator-topics, 44: 203, November 29, 1923.

A study based on questionnaires returned by 138 Michigan superintendents in towns of less than 2,000 population. Gives teaching experience, also type and scope of training from elementary grades to date of study.

Galloway, Oscar Fitzgerald. The supervision of county schools in Kentucky. Kentucky high school quarterly, vol. 11, April 1925.

A study of the county school system of Kentucky, with special reference to the supervision of county schools and to formulate a program for their improvement. Reports of all the State superintendents of public instruction, acts of the Kentucky legislature, surveys of other States, other educational publications used. Higher qualifications for teachers, abolition of graded school districts, consolidation when possible, change in method of distributing school funds, and unified educational practice for entire State recommended.

Grace, Adnie E. Case studies in supervision. *Journal of rural education*, 1: 210-214, January 1922.

A presentation of 10 cases of actual methods of instruction used by teachers. Each case was separately diagnosed as to its chief faults, suggestions were offered for improvement, and a conference arranged with the teacher by the supervisor for discussing the matter.

Hall, H. E. A study of school supervision in the county districts of Ohio. *Journal of rural education*, 5: 231-236, January-February 1920.

Data from Ohio regarding amount of supervision in county districts; how supervision is organized and administered; how county supervisors distribute their time; and the supervisory activities carried on.

— Organization of supervision in Wood county, Ohio. *Journal of rural education*, 4: 28-34, September 1924.

The departmental plan of organization for rural school supervision in operation in Wood county, Ohio, since 1920.

I. Types of organization: (1) Meetings of the county superintendent and supervisors; (2) meetings of the county superintendent, supervisors, superintendents and principals of village and consolidated schools; (3) "principal teacher" appointed where impossible to have a principal in a small school; (4) quarterly institutes; (5) conferences concerning outside activities.

II. Work of rural supervisors: (1) Supervision program; (2) schedule and visits; (3-7) duties.

III. Evidences of progress under departmental plan of rural supervisors.

Harrington, D. M. Unsupervised activities in an ungraded school. *Journal of rural education*, 1: 24-27, September 1921.

How 11 children of an ungraded school occupied their time in a so-called free period from 11 to 11:40 daily, with little or no supervision by the teacher. Discusses drawing, modeling, reading, woodwork, dramatization, and puppet show.

It is believed that valuable learning took place in what by some might be called simply a play period.

Hervey, Henry D. What can be done to help the teacher whose work is unsatisfactory? *Journal of New York State teachers' association*, 10: 21-27, February 1923.

Hoppes, W. C. The evaluation of rural supervision in Oakland county, Michigan. Lansing, Mich., State department of instruction, 1926. (Unpublished study.) See also *Journal of rural education*, 5: 289-290, March-April 1926, and Bulletin no. 7, of the Michigan education association.

An attempt to measure the influence of rural supervision in Oakland county, Mich. Schools similar in nature, i. e., with teachers of similar qualifications, similar number of pupils, etc., were selected in Macomb county. The children in these schools were matched on the basis of intelligence achievement tests and the influence of supervision was determined in terms of the amount of improvement manifested on the different educational tests.

A comparative study. Sixty representative schools in one county were matched by an equal number in another with due consideration for number of pupils and age, training, experience, tenure, and salary of teachers. The results were carefully evaluated by means of standardized tests. The plan of procedure is indicated and conclusions given that the supervision is effective. The following conclusions were arrived at:

1. That the operation of a program of supervision of rural schools as employed in this experiment is entirely feasible as a part of a typical county school organization.

2. That the level of achievement in nine phases of four school subjects among the pupils of Oakland and Macomb counties, in the fall of 1924, was considerably below the expected standards; that the pupils in the supervised schools of Oakland county, in the spring of 1925, approximated the expected standards and greatly exceeded the achievement of the pupils in the unsupervised schools of Macomb county.

3. That the supervised teachers, with very few exceptions, heartily endorsed supervision as it was conducted in Oakland county.

Hoppes, W. Supervision of rural schools. *Journal of rural education*, 3: 261-262, February 1924.

Need shown by the quality of rural teachers, isolation in which they work, and community attitude. County organization most common; 14 States have no county supervisors. Salaries, duties, and requirements of supervisors in different States given. Suggested program outlined.

Hughes, Hilda. Lessons in supervision of rural schools from the Indiana experiment. *National education association. Addresses and proceedings*, 1925. p. 568-576.

Supervision demonstrated in two counties of Indiana. Results compared with two control counties. Per cent of progress in the supervised counties exceeded that in the control by 14.3. Children in demonstration counties received 22.9 days more instruction. Large schools made greater gains than small schools. Efforts in Lagrange county confined chiefly to reading and language. Supervision decided help.

Maryland. State department of education. Does the helping teacher really help the rural schools? By Jennie E. Jessop, rural school supervisor. *Maryland school bulletin*, vol. 5, no. 2, October 1923. 31 p. (See also *Educational administration and supervision*, November 1925.)

A careful summary of a year's work in rural supervision by a helping teacher.

——— Making the most of supervision. By Jennie E. Jessop, rural school supervisor. *Maryland school bulletin*, vol. 7, no. 1, September 1925.

A review of supervisory activities in the Grantsville unit of Garrett county, Md., for the year 1924-1925. Includes: County plan for supervision, teachers meetings, use of tests, publicity, and summary of activities.

——— Workable daily programs for one and two-teacher schools. *Maryland school bulletin*, vol. 6, no. 11, May 1915. 34 p.

A critical study of the various problems relating to the daily schedule. Good illustrations and discussion of underlying principles.

——— A year's supervision of elementary instruction in Caroline county, 1923-1924. *Maryland school bulletin*, vol. 6, no. 5, January 1925. 30 p.

"It is presented to the profession as a worthwhile contribution to the rather meager available concrete material of high grade on supervision of instruction as carried on in Maryland by our supervising teachers and 'helping teachers.'"

Michaels, Matilda O. The Durham county program of administration and supervision. *Journal of rural education*, 1: 452-455, June 1922. (See also *Journal of rural education*, 4: 173-175, December 1924; and *North Carolina education*, 10: 8-9, June 1922.)

Supervisory system based upon the group center idea. Some thriving, large school in a certain vicinity is designated as the model and demonstration school for the others in the vicinity. Accomplishments excel nonsupervisory districts.

Supervision through the use of so-called group center schools as centers for demonstration work. The 23 rural schools divided into six group centers, which aim to be demonstration schools and models in equipment.

Michigan education association. The value of supervision in the rural schools of Oakland county. (Bulletin no. 7.)

A comparative study of the value of supervision in rural schools. Two counties are studied—one in which all supervision is done by the county superintendent, and the other in which there are three supervisors under the direction of the county superintendent. Numerous data are presented which indicate that there are numerous advantages in the supervisory plan. The conclusion is reached, "That the operation of a program of supervision of rural schools as employed in this experiment is entirely feasible as a part of a typical county organization."

Nelson, Milton G. [An analysis of the activities of district superintendents of schools in New York State.] Doctor's thesis, Cornell university, 1928.

This is a study of the effect that physical characteristics of supervisory districts and measurable personal characteristics of district superintendents have upon the percentage of total hours that district superintendents actually give to the various phases of their work. Tentative norms for the percentage of total hours given to each of 36 basic activities are posited and a plan is provided for the making of a self-survey by a district superintendent.

Newbury, Maud C. Supervision of one-teacher schools. Washington, D. C. Government printing office, 1923. 55 p. 8". (U. S. Bureau of education Bulletin, 1923, no. 9.)

A discussion from the standpoint of the supervisor of the need for supervision, the attitude and growth of the supervisor, and the effective use of activities and methods in the field of supervision including, among others, school visitation, teachers' meetings, extension courses and the rural teachers' council.

Nutt, J. H. The superintendent as supervisor in the small school system. Mississippi educational advance, 16: 352-353, June 1925.

Questionnaires on their professional practices were sent to 84 superintendents in towns of 1,500 to 3,500 population. Superintendents can not supervise all the work in their schools. Select tasks most worth while.

O'Brien, F. P. The county superintendent of schools as supervisor of instruction. Journal of educational research, 13: 345-354.

Data "from 77 of the 105 counties of Kansas." The supervision of a majority of the pupils and teachers in the elementary schools of the State is dependent almost entirely upon the county superintendent of schools. He makes approximately one visit a year, averaging one and a quarter hours, to each rural school. One-half of visits devoted to supervision of instruction. Poorly trained. Receives low salary.

— An experiment in supervision of English. Journal of rural education, 5: 204-218; 330-343.

Results of a definite plan of supervision in two small Kansas high schools. "The average gains pupils made during period of this experiment varied considerably by classes and by subjects. In spelling, the average gain made by the eighth grade pupils during the five months closely approximated 1½ years of school progress; in reading, the average gain made by the same grade was two years of school progress; . . . In vocabulary, the seventh grade pupils made an average gain that was 50 per cent of their average score in the initial test; . . . In rate of reading the same class gained 37 per cent of its initial test average."

Pittman, Marvin Summers. The value of school supervision. Baltimore, Md., Warwick & York, Inc., 1921. x. 129 p. 12".

Experiment carried out in Brown county, S. Dak. Problem: What is the effect of supervision upon the work of rural schools when the supervision is done according to the zone plan? After 7 months results showed that children advanced 194 per cent; teachers under supervision did four times as much professional reading; average attendance 76 per cent as against 70.7 per cent in unsupervised schools; pupils in lower grades made greater gains; 92 per cent of pupils continued in school to the end of year against 69 per cent in unsupervised schools. Tables and sample letters.

— The zone system of rural supervision again successful. American schoolmaster, 15: 232-234, June 1922.

To test the value of the zone plan of rural supervision an experiment was tried with a group of 10 one-room schools in Washtenaw county, Mich., in 1921-1922. Control group used. Results show: Total number of points favoring experimental group, 11.97; total number of points favoring control group, 1.21.

The conclusion drawn is that the benefits of the zone plan are inherent in the plan.

Prescott, W. B. How to raise the standards of county supervision through the county unit. *Journal of rural education*, 4: 73-81, October 1924.

A detailed description of the organization of the school system in St. Landry parish, Opelousas, La.

Reichelt, Norma A. A study in rural supervision. Ph. B. thesis, University of Wisconsin, August 1925.

To study administrative phases and instructional phases of rural supervision, experience and liberal use of references. Instructional supervision in rural schools is a comparatively recent movement. Eleven States make no provision for rural supervision other than that done by the county superintendent. The lack of a sufficient number of men and women specifically trained and equipped to properly supervise rural schools is a problem.

Reinoehl, Chas. M. Children's arithmetic problems. *Journal of rural education*, 1: 215-221, January 1922.

A collection of children's problems gathered through local teachers of Montana. Children submitted problems concerning daily life situations where arithmetic is used, presenting also their solution.

Reynolds, Annie. Some lessons from a decade of rural supervision. Washington, D. C., Government printing office, 1925. 19 p. 8°. (U. S. Bureau of education. Bulletin, 1925, no. 9.)

This study includes: Factors leading to growth in the extent of rural school supervision; some results secured through rural school supervision; general problems affecting success; and agencies helpful in promoting supervision.

Scriber, Joseph H. and Hopkins, L. Thomas. Improving rural school instruction and supervision in Colorado. [Boulder, Colo., 1925.] 8+99 p. incl. tables. 8°. (University of Colorado. Bulletin, vol. no. 25, no. 1, January 1925.)

Contents: How the district system works, the county unit of organization and administration, a modern country school, giving life to the district system, tests used, giving and scoring of tests; distribution and classification of pupils in relation to chronological age, mental age, intelligent quotient, grade achievement.

Simpson, L. J. and Stern, Bessie C. Improving instruction in reading. *Elementary school journal*, 25: 594-606.

An analysis of the status of reading in the elementary schools of Maryland, 1923-24. Tests administered in October and May. Classification of results by one-teacher schools, two-teacher schools, and graded schools.

Standard elementary schools. A symposium. *North Carolina education*, 18: 7-14, February 1924.

Scientific tests as a means for standardizing classroom procedure, by Annie M. Cherry, p. 7-9; Using achievement and intelligence tests as a means of standardizing the work in reading, arithmetic, and spelling in Pitt county, by Maycie Southall, p. 9-10; Forsyth county standard tests in 1922-23, by Cordelia Camp, p. 11-12; Durham county report of tests in 1922-23, by Matilda O. Michaels, p. 12-13; Gaston county reading, language, and arithmetic tests, 1922-23, by Carrie Glenn, p. 13-14.

Stubbs, Florence H. Some fundamental questions in rural school supervision. *Journal of rural education*, 3: 422-428, May, June 1924.

Young and inexperienced teachers in country schools. In Virginia, turnover 25 per cent annually. Wide variation in number of teachers per superintendent. Obstacles preventing State-wide supervision: Lack of funds, lack of expert supervisors, attitude of teachers.

Van Syckle, Edith L. A year's work in rural supervision. (Talbot county, Montana.) *Journal of rural education*, 4: 439-444, May, June 1925.

A working plan with time analysis. Helpful points for year discussed and plans for 1924: (1) more intensive work in spelling and penmanship; (2) special study of the English work; (3) special help to first grade teachers; (4) center group school for demonstration purposes; and (5) raising the standards of promotion.

Witherspoon, Eugenia. The subnormal child in the rural school [Kentucky]. *Kentucky high-school quarterly*, vol. 7, January 1921.

An investigation to determine which of the laggard students are mentally deficient, and to decide upon the best means of dealing with them. Various studies of bright and dull children, and discussions of training teachers for special classes. Form the attitude of being interested in the inborn characteristics of each pupil as furnishing the fundamental starting point for treatment of each. Learn to see others as they are.

Yawberg, A. G. Principles and methods of rural school supervision. *Journal of rural education*, 3: 105-116, November 1923.

Purposes of education summarized. Essentials of adequate supervision and methods. Program outlined, sample letter and reports. Plan has been very successful.

TESTS AND MEASUREMENTS

Brooks, Samuel S. Putting standardized tests and scales to practical use in the rural schools. *Journal of educational research*, 1: 392-397, May 1920.

A study of 28 rural ungraded one-room schools in New Hampshire. Four problems set up: To grade the schools fairly and accurately; how to measure the progress of pupils; how to measure ability of teachers; to find a practical method of supervising study and of teaching how to study.

Journal of educational research, 2: 425-435, 729-735, June, November 1920.

Identical student examination papers rated by 24 teachers. Wide variation in final marks. Value of median score and standard tests explained. Actual use of tests proved satisfactory.

Journal of educational research, 3: 12-22, January 1921.

Tests showed pupils high in some subjects, low in others. Given in fall and again in spring; improvement shown. Graphs and charts.

Journal of educational research, 4: 161-172, 255-264, October, November 1921.

Progress of pupils in elementary subjects measured by standardized tests. Charts. Results showed gain during year. Teachers' efficiency also measured. Stimulated interest and effort. Majority showed improvement. Bonuses awarded successful ones.

Journal of educational research, 4: 337-346, December 1921.

Efficiency of special teaching methods compared by means of standardized tests. Superiority of groups using practice tests shown.

Journal of educational research, 5: 217-238, March 1922.

Presents some practical uses of intelligence tests. Measures objectively the relative mental abilities of pupils; shows the high and low students, and in promotion. Recommends using group intelligence tests, supplemented by the Binet-Simon individual test in doubtful cases.

Carpenter, D. F. A study of rural school achievement in a Massachusetts supervisory district. *Journal of rural education*, 4: 34-40, September 1924.

Nineteen schools studied, 13 one-room. Several intelligence tests used. Results show that three-fourths of pupils are being advanced as rapidly as growth will permit. Inferiority of one-room schools due to imposed conditions.

Connecticut. State board of education. Some test results in a rural community. By R. N. Brown, State supervising agent. Connecticut schools,

successor of Common school Journal founded by Henry Barnard, 1838. Hartford, Conn., March 1920. vol. 7, 12 p. 8°.

A general survey of intelligence and achievement of pupils of Harwinton, Conn., a rural community, to indicate needs of pupils for individualized instruction. National intelligence test, form A, and Stanford achievement test, form A, were used. Results show pupils to be above grade.

Cotton, C. E. Administrator as surveyor. Idaho teacher, 4: 468-471, May 1923.

The author illustrates, through data from intelligence and achievement tests secured in his own school, how the superintendent of the smaller schools may collect meaningful facts.

Coxe, Warren W. and Orleans, Jacob S. One year's reading progress in New York rural schools. Albany, N. Y., 1925. (University of the State of New York. Bulletin no. 814, October 15, 1925.)

Reading test given to from 700 to 13,000 children in the State. Tables and diagrams. Results show, on the whole, a gain in reading, but the grade status for the State as a whole is below grade norms.

— and Cornell, Ethel L. A study of pupil achievement and special class needs in Westbury, Long Island. Albany, N. Y., 1925. 52 p. tables, diagrs. 8°. (University of the State of New York. Bulletin no. 839. November 1, 1925.)

Intelligence and achievement tests in a small New York village. Shows need for reclassification of pupils.

Cram, Fred D. Surveying rural schools. Bulletin of the Iowa State teachers college, vol. 23, no. 3, pt. 1, July 1922. 75 p. tables.

Intelligence and achievement tests given in Iowa show their practicability in small schools. "Children in one-teacher schools fall entirely too low in all tests and in all subjects." "There is no difference worth considering between the performance of those living in the country and those living in town, when they comprise mixed groups in a consolidated school." Little difference shown between boys and girls.

Denny, C. C. Second annual survey—rural school spelling. Arkansas teacher 10: 8-9, March 1922.

Scores given in this report represent the spelling ability of nearly 500 one-teacher schools scattered throughout 50 counties in Arkansas, and that of 180 Arkansas town schools, in comparison with the Ayres standards. Data show that rural school pupils can be taught to spell as well as pupils are spelling in town schools.

Graber, O. C. A study of sex differences in mental development as revealed by group intelligence tests. Colorado school Journal, 39: 25-30, March 1924.

This study of sex differences as revealed by mental growth curves is based on observation over a period of three years of 1,133 cases, the entire school population of a community. The study shows: A considerable constancy and permanence for the mixed group; a considerable sex difference; the necessity of comparing boys' and girls' curves with the mean in evaluating mental growth differences; a marked correlation in mental and physical growth; a constant superiority in I. Q. for girls of all ages in an unselected group; girls' mental growth curve more irregular than boys'; a high correlation of various group tests; and the injustice done at certain ages in using group tests on mixed groups.

Huber, Kathryn E. The results of using Monroe's standardized silent reading test in rural schools. Journal of rural education, 1: 265-266.

Irion, Theo. W. H. and Fischer, Fred C. Testing the intelligence of rural school children. American schoolmaster, 14: 221-223, June 1921.

A preliminary report on mental tests given 361 rural and 38 town children applying for the eighth grade examinations of Wayne county. The purpose of the tests was to provide the examiners an additional check on the boys and girls, and incidentally to furnish material for comparing rural and town groups. The difference between the two medians was approximately 10 points in favor of the town group. Younger

children scored higher than older children. Negligible differences between sexes in both groups. Difference in scores not altogether attributable to lower native capacity of rural children; factors of environment and differences in training considered.

The plan was to equalize the groups, and continue the study, giving accurate information on points raised.

Lufkin, H. M. The army alpha test in rural schools. *School and society*, 13: 27-30, January 1921.

Test given to 561 children in rural schools in central New York. Tables and charts. Results showed steady increase in median scores from the ages of 9 to 18; 8-year group had score equal to 9-year group; high correlation between age and grade.

Maryland. State department of education. Annual report. A survey of three [Washington, Somerset, and Dorchester] counties [Maryland]. 1921. p. 205. 8°.

A testing survey of the pupils in these three counties, both town and rural, to determine where and how instruction might be improved. Reading and arithmetic tests given to all pupils. Town children were found to be well up to standard in arithmetic. Country children in seventh grade had fourth grade reading ability. Other grades similarly advanced or retarded.

Morrison, J. Cayce. Spelling in New York rural schools; a study of achievement, of practices in teaching and of methods for improving the teaching of spelling in New York rural and village schools. Albany, N. Y., 1922. (University of the State of New York. Bulletin no. 764, August 15, 1922.)

Represents 44 counties, 85 supervisory districts, the work of more than 4,000 classroom teachers, and the achievement of nearly 60,000 pupils. Bibliography: p. 29-30.

Newbury, Maud C. Intelligence and reading test in a rural county. *Journal of rural education*, 1: 174-176, December 1921.

Haggerty tests used; 819 children tested. Close correlation between ages and grades. Results used in re-organization. Valuable aid to teachers.

Osburn, W. J. Educational measurements in the rural schools of Wisconsin. *Journal of rural education*, 1: 441-446, June 1922.

More than 2,000 ninth grade pupils tested; 30 per cent failed to exceed sixth grade standard in silent reading. Steps taken to improve situation. Second test in five months. Improvement illustrated by graph. General improvement shown.

Reinoehl, Charles M. A study of instruction in Montana's rural schools. *Intermountain educator*, 17: 197-198, January 1922.

A study of the relative efficiency of instruction in consolidated and in one-teacher schools. Standard tests were given in 34 rural and in 11 consolidated schools. Of the 42 corresponding median scores shown in the table for each subject in the six grades, 83 per cent are favorable to the consolidated school. Conclusion: With more children taught in the same school, instruction is likely to be greatly improved.

Skye, Andrew O. Silent reading in the Rockland schools. *American schoolmaster*, 14: 85-91, March 1921.

A study of silent reading ability in the Rockland schools; oral reading only had been taught until year of investigation. Gives results of Monroe's silent reading tests in grades 3-8, states nature of handicaps revealed, and recommends ways of improving pupils' silent reading ability.

Smith, Franklin O. A silent reading survey. *Inter-mountain educator*, 17: 51-55, October 1921.

A report on a silent reading survey of the schools in three counties in Idaho, four counties in Montana, and six counties in Oregon. The Monroe silent reading test was used. The average difference in silent reading ability between rural and

town schools was 1.4 per cent for rate and 7 per cent for comprehension in favor of town schools. Rural schools averaged 8.2 per cent below the standard for rate and 17.7 per cent below for comprehension.

Wilson, Frank J. Achievement in fundamental subjects in some rural schools in Connecticut. *Journal of rural education*, 3: 19-27, September 1923.

Pupils in 14 elementary schools studied. Tests in spelling, arithmetic, silent reading, handwriting. Teachers compared. Those in four and five-teacher schools superior to those in one-teacher schools. Organization has little effect upon progress and ability to score on tests. Emphasis on lack of citizenship training consolidated schools."

COMPARISONS BETWEEN SMALL AND LARGE SCHOOLS

Black, Lester. The value of consolidated schools as determined by a mental and educational survey of one-room and consolidated schools. *Educational research bulletin*, 2: 305, January 1923.

"The per cent in one-room schools reaching the point attained by 50 per cent in the consolidated school varies from 0 per cent in arithmetic and verbs to 25 per cent in pronouns. That is, no person in the one-room schools reaches a point in achievement in arithmetic reached by one-half of the pupils in the consolidated school."

Chapman, J. Crosby and Eby, H. L. A comparative study, by educational measurements, of one-room rural school children and city school children. *Journal of educational research* 2: 636-646, October 1920.

Groups of 71 children, ages 11 to 13, tested. Nine tests used. Tables. In abilities independent of school training, small differences; dependent on school training rural children notably inferior.

Favrot, Leo M. Discussion of the report of the committee on a comparative study of instruction in consolidated and one-teacher schools. *Journal of rural education*, 3: 433-438, May, June 1924.

Advantages of consolidation pointed out. Six questions asked by committee answered.

Foote, John M. A comparative study of instruction in consolidated and one-teacher schools. *Journal of rural education*, 2: 337-351, April 1923. (Also in *National education association. Addresses and proceedings, 1923*, p. 812 ff.)

Tests in reading, arithmetic, language, spelling, and handwriting. Reports from 19 States; 10,999 pupils in consolidated and 4,353 in one-teacher schools tested. Tables show age-grade distributions, grade achievement, yearly progress, and age-achievement. Small difference in results of instruction. The study was made to determine in which of the two outstanding types of rural schools, the consolidated and the one-teacher, are the results of instruction superior. Pupils' grade and age achievement were measured by giving tests in reading, arithmetic, language, spelling, and handwriting among pupils in 20 States. Intelligence was assumed to be equal in the two groups of pupils. One-teacher school pupils were retarded in marked degree. For further data see Master's thesis, George Peabody college for teachers, by John M. Foote, on same title.

Frost, Norman. A comparative study of achievement in country and town schools. New York, Teachers college, Columbia university, 1921. 70 p. 8°.

Achievement measured by the Trabue language scales; by the Courtis standard research tests in arithmetic, series B; and by the Thorndike silent reading scale, Alpha 2. These tests given in grades 3 to 8 inclusive in all public schools in Madison county, Ky. Charts and tables. Conclusions: Difference in performance in school subjects can be obtained for children of different ages; this difference is a measure which may be used in schools or school systems, especially in rural schools; Madison county six-month schools compare unfavorably with all other schools measured. The nine-month schools compare more favorably.

Haggerty, M. E. Achievement in small and large schools of New York. In Rural school survey of New York State; educational achievement. Joint committee on rural schools. Ithaca, N. Y., 1922. p. 210-223.

Concludes that large schools generally show better achievement than small ones in tests given.

Iowa State teachers college. Report of committee. Results of teaching in one-room rural schools compared with that in consolidated schools. 9 p. (Mimeograph.)

A testing survey with analysis of teacher qualification in the Colo. Iowa, consolidated and surrounding schools to determine which type of school functions best. Pupils in graded school are older per grade, but better classified. Teachers equally prepared, but those in one-teacher school with little experience.

Jungck, Frederick William. Comparative ability of rural and city school children as shown by certain standard tests. Ph. B. thesis, University of Wisconsin, June 1920.

Standard tests and how they may be applied to the work of the schools; and to determine if the instruction in city schools is more efficient than that of rural schools. Educational tests were given to 214 city school children and 101 rural school pupils. On the whole the evidence revealed is in favor of the city schools. The least difference in the efficiency of the schools is in the seventh and eighth grades. Those subjects requiring mechanical drill, such as speed in reading and the fundamental processes of arithmetic, do not show so marked a difference.

Kansas. State school code commission. Survey committee. The results of instruction in different types of elementary schools in the State of Kansas. Report, 1921-22. Pittsburg, Kans., Kansas State teachers college press [1922] 46 p. tables, diagrs. 8°. (Kansas studies in education.)

Tests given in spelling, reading, arithmetic, written composition, and handwriting. Also data on age-grade distribution and character of teaching force. "It is evident from the facts presented in these pages that many of the rural schools are producing very unsatisfactory results."

Kruse, P. J. Some findings and suggestions of the Texas educational survey. Journal of rural education, 4: 353-358, April 1925.

Analysis of results for mental ability; size of school as factor in efficiency; selection of pupils of small and large rural schools; relation of length of year to achievement; and comparison of achievements in small and large rural schools and city schools. Better training in reading emphasized.

Morrison, J. C. Comparative study of instruction in consolidated and one-room rural schools in New York State. Journal of rural education, 1: 355-359, April 1922.

Eleven consolidated schools, 48 one-room rural schools. Tables show results of tests in arithmetic, reading, spelling, language, and writing. Difference in achievement small. Consolidated group superior. Further study recommended.

Myers, Charles Everett. The one-teacher school, front and center. Journal of rural education, 3: 439-440.

States a philosophy of the one-teacher schools and contends that certain data already collected show, when properly interpreted, that the one-teacher school actually achieves more than larger ones.

Shouse, J. B. Some West Virginia performances in second grade. School Journal and educator, 52: 358-359, May 1923.

An attempt to show the relative efficiencies of second grade work in 61 graded and ungraded schools in eight counties of West Virginia. Of 469 children tested, 127 were in 32 one-room schools, 185 in 18 schools having one teacher for two to four grades, 287 in 11 schools having a full-time teacher for second grade. Study finds that pupils in one-room schools excelled in spelling and addition, and graded school pupils excelled in reading ability. Recommends that one-teacher schools emphasize spelling less and reading more.

TEACHERS: STATUS AND PROFESSIONAL PREPARATION

Anderson, C. J. The status of teachers in Wisconsin. Madison, Wis., Department of public instruction, 1921-22. 156 p. tables, charts, diagrs. 8°.

A report on conditions relating to the teaching personnel of one-room rural schools of Wisconsin in 1921-1922. Of the total, 6,543 rural teachers, 93.2 per cent had less than two years training beyond high school; of 6,512 rural teachers, 4,152, or 63.7 per cent, were born on farms; of 6,216 teachers, 94 per cent were women. The 1921-22 corps of rural teachers began work at the median age of 18.86 years; their teaching experience had been 1 1/4 years; average tenure, 1 year; median salary, \$558. State has 72 standards possible for certification. Recommendations: (1) All teachers' certificates should be issued by State superintendent; (2) all certificates should be valid throughout State; (3) subjects required for certification should be fixed by State superintendent; (4) minimum educational and professional qualifications for rural teachers should be fixed by statute.

Bagley, William C. Rural school survey of New York State. The teaching personnel. Philadelphia, William F. Fell co., 1923. 107 p. tables, diagrs. 12°.

Data based on replies from 2,493 teachers, majority in one-teacher schools. Tables and diagrams showing distribution as to sex, age, and experience; conditions of living and work; salaries; and educational qualifications of rural school teachers. Composite "picture" of typical teacher given.

Benson, Charles Emile. The output of professional schools for teachers. Baltimore, Md., Warwick & York, Inc., 1922. 88 p. tables, diagrs. 8°.

A study of the distribution of graduates, 1910, 1915, and 1920, from 22 teacher training institutions in 18 States. Data on 8,790 cases obtained through questionnaires and visits to the normal schools. Graduates of the two-year curricula were distributed to rural schools as follows: In 1910, 9.7 per cent of the 1,604 graduates; in 1915, 9 per cent of the 2,353 graduates; and in 1920 only 6 per cent of the 2,070 graduates, 5.2 per cent of these going to one-room schools. To the villages of less than 1,000 inhabitants the two-year curricula sent approximately one-third of its graduates for each of the three years. The three-year curricula sent only two graduates to rural schools in 1920; to village schools it sent 42.4 per cent of the graduates in 1910, 30.2 per cent in 1915, and 25.2 per cent in 1920. The four-year curricula supplied to rural schools only one graduate in 1920 and to village schools a larger number than in either of the previous years. Of the 505 male graduates of two-year curricula for the three years studied, 19 per cent in 1910, 17.2 per cent in 1915, and 4.3 per cent in 1920 entered rural schools; 40 per cent in 1910 and in 1915 entered village schools, and only 27 per cent in 1920. The four-year curricula increased its supply of male graduates to village schools from 9.6 per cent in 1916 to 31.3 per cent in 1920. Data show that rural children do not have a just proportion of trained teachers. Suggestions: That institutions for teacher training inform their State departments of the exact distribution of their graduates; that student accounting be placed on a business basis; that the record of a graduate include: (a) A brief history of previous training; (b) specific curriculum completed; (c) grades or marks received; (d) judgments of instructors as to suitability for particular teaching position; (e) placement of the graduate as to type of school entered, specific teaching position, or occupation other than teaching; (f) success attained in position entered; and (g) changes in position or occupation, subsequent study, and degrees received.

Bliss, W. B. The intelligence ratings of county normal school students. Educational research bulletin, 2: 35-37, February 1923. (See also Journal of rural education, 1: 418-424.)

Terman group test of mental ability given to 1,305 students in 40 county normal schools of Ohio in 1921. The median score was 141.21. Data collected from 1,717 high-school seniors show that those planning to go into elementary school teaching make a lower median score on the Terman test than all except those planning to go into the mechanical trades.

Brandt, Rose K. Practice teaching in the county training schools of Wisconsin. *Journal of rural education*, 2: 454-463.

Median length of course in observation, participation, and practice teaching offered in county training schools of Wisconsin is 27 weeks. Requirements vary among schools. Evaluates work and suggests standards for adoption.

Buckingham, B. R. One-room rural teachers. Educational research bulletin (Ohio State university, College of education), 4: 228, May 27, 1925.

Summary of a study of 1,114 rural teachers in Ohio. Medians as follows: Age 22 years; 2 years of training or less beyond high school; experience, third year; grades taught, 7 or 8; number of children taught, 22; homes represented in school, 11; term, 8 months; salary, \$825.

Capps, A. G. and others. Report of committee on teachers' salaries and tenure of office. School and community (Columbia, Mo.), 11: 37-38, January 1925.

A review of findings of committee of Missouri State teachers' association on teachers' salaries and tenure of office. Includes important findings, such as, present salaries compared to other years, cost of living, high school and elementary teacher salaries compared, tenure, and certain recommendations.

Carney, Mabel. Preparation of rural teachers in high schools. A summary of present practice. Washington, D. C., Government printing office, 1924. 27 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 33.)

A summary of present practice in teacher training in high schools. Gives information concerning management, qualifications of instructors, courses of study, amount of State aid, etc., in States practicing this form of teacher preparation.

— The rural-teacher situation in the United States. Washington, D. C., Government printing office, 1923. 12 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 14.)

A study of the preparation of the teaching staff and facilities of several States for preparing teachers for rural schools.

Chamberlain, Arthur H. Urgent financial needs of California school system as related to teacher-training facilities and the office of county superintendent of schools. *Sierra educational news*, 17: 63-17, February 1921.

Report of study made by committee of California State teachers' association to show discrepancy between salaries paid classroom members, instructors in normal schools, and county superintendents. Statistics from State teachers colleges, cities, and counties show salaries of teachers college instructors and county superintendents are low.

Coffman, Lotus D. Teacher training departments in Minnesota high schools. New York, General education board, 1920. 92 p. tables, bibliography.

Presents an historical statement of the training class in Minnesota; data regarding teachers and students; an analysis of the curriculum; observations of instruction; methods of administration; data on costs; and judgments of superintendents regarding the value of the training class. "The wisest policy, therefore, would seem to be to retain the training departments in the city schools as a temporary expedient, but to supplant them as soon as practicable by normal school training."

Colorado education association. Report of committee on teachers' salaries in Colorado. *Colorado school journal*, 35: 5-40, March 1920.

"A handbook for boards of education and teachers." Diagrams and 21 tables. Three chief considerations: (1) Wealth of the district; (2) salaries paid; and (3) cost of living. Data obtained largely through questionnaires sent in December, 1919, to county and city superintendents and through question blanks to teachers. Data show that rural medians in Colorado were: Wealth per teacher, \$225,000; tax rate, 4.125 mills; salary \$725; necessary living expenses for 12 months \$720; deficit, \$6.67. The study points out that rural communities, with a median wealth of \$225,000 per teacher, were able to pay better salaries than the first-class districts with their median of \$149,500, and that equalization of taxation within the county was greatly needed in view of a difference of \$1,089,220 in assessed valuations per teacher in one county.

Connecticut. State board of education. Division of research and surveys. A study of the teaching personnel in 95 Connecticut towns served by State supervising agents, 1925. 42 p. tables, graphs. (Multigraph.)

Data obtained largely from Supervision form 4 for September 1925. Summary of teacher preparation for the 377 one-teacher schools: (1) The eastern region, with more one-teacher schools than both other regions together, has the smallest percentage of normal school graduates; (2) normal graduates, 47 per cent (70 per cent in graded schools); (3) of beginners in one-teacher schools, 79 per cent are normal graduates; (4) no advantage in retaining tolerable and untrained teachers in preference to employing beginners; (5) 21 towns have 100 per cent normal graduates as compared with 13 in 1924; (6) 11 towns have no normal graduates as compared with 21 in 1924.

Cook, Katherine M. State laws and regulations governing teachers' certificates. Washington, D. C., Government printing office, 1921. 244 p. 8°. (U. S. Bureau of education. Bulletin, 1921, no. 22.)

The object of this study was to set forth under the same headings the laws and regulations relating to granting teaching certificates in the 48 States. A study of all such laws and regulations was made and most important characteristics set forth in tabular form. The result gives information concerning qualifications, validity, etc., of teaching certificates and makes comparisons among States possible. This bulletin is now being revised.

Cowart, R. W. Preparation of white teachers in the public schools of Alabama. Alabama school journal, 43:11-12, January 1926.

Statistics compiled from enrollment forms filled in by all teachers attending institutes in Alabama during fall of 1924. Of each 100 teachers, 13 were college graduates, 18 normal school graduates, 48 high-school graduates only, and 21 had less than high-school preparation.

Cramer, Roscoe V. A study of the output of teacher-training departments in Missouri high schools. School and community, 11:64-66, February 1925.

To ascertain the characteristics of teacher-training graduates and to find what they have actually done since graduation. Source of data: 6,215 graduates, or about 90 per cent of the total output of the teacher-training courses over a ten-year period. Conclusions: (1) High-school teacher-training departments have rendered a valuable service; (2) their graduates should not be crowded out of positions by competition with third and second-grade teachers; (3) the departments should be continued in one high school in each county until practically all rural teachers of the State are trained; (4) State department of education should be empowered to approve high schools for teacher training on basis of per cent of graduates who teach as well as on number of pupils enrolled; (5) each teacher-training school should be required to keep a professional record of all its graduates for at least five years.

Davis, S. E. Teacher importation and tenure. Montana journal, 2: 18-17, November 1925.

A study of importation and tenure of 5,403 teachers in Montana in 1924-1925. Data obtained from superintendents, principals, and teachers. Of the 708 teachers imported, 267 were for rural (one and two-teacher) schools; 88 of these had had no training beyond high school. The annual turnover for rural schools was 72.1 per cent. Of the 2,383 rural teachers, only 34 had had a tenure of over five years.

Donovan, Herman Lee. A State's elementary teacher-training problem (Kentucky. Nashville, Tenn., George Peabody college for teachers, 1925. 93 p. tables, diagrs. 8°. (George Peabody college for teachers. Contributions to education, no. 17.)

Study undertaken to show: (1) History of teacher training in Kentucky; (2) present status of elementary teachers; (3) need of and facilities for training elementary teachers; (4) cost of employing trained teachers of elementary schools.

Source of data: Biennial State reports; statutes; catalogs and reports from normal schools; histories of education; questionnaires to teachers of the State; unpublished survey by the General education board of teacher-training institutions; intelligence tests of student teachers; and office records of normal schools.

Findings of the study are in part: That 32 per cent of the rural teachers are men as compared with 14.1 per cent for the United States; the median white country teacher has only 3.9 years' training above the eighth grade; that 75.3 per cent of the certificates are issued by antiquated examination methods; that the turnover in the rural school is 25 per cent; that 41.9 per cent of the teachers change positions annually; and that the median salary of rural teachers is \$545.

Concludes that to have trained teachers the State must double—from income or severance tax—the amount of money spent on public education; the sum would be \$17,839,012.46 annually, or \$38.65 per child in average daily attendance.

Recommends: A modern certification law; a median annual salary of \$1,028 for a normal school graduate; adequate support for the present teacher-training institutions; and provisions for some of the larger high schools in the State to give training to rural teachers.

Dr. Donovan's bulletin is reviewed by Wellington Patrick of the University of Kentucky, in the Kentucky high school quarterly, vol. 11, no. 3, July 1925, under the title, "A scientific study of Kentucky's teacher training problem."

Dougherty, Eleanor M. A study in the personnel of normal-training classes in 25 high schools. Thesis, M. A. degree, University of Minnesota, 1925.

The purpose of the study is to provide a description in a number of respects, scholastic and other, of the members of the normal training classes in Minnesota high schools. The materials of the study are the results of intelligence tests and of achievement tests in certain common branches, and data concerning occupation of parents, religious preferences, etc. The study involves a comparison of these students with all seniors in the same high schools, one purpose being to ascertain what types of selection are operative in making up normal training classes.

Edmonson, J. B. Preparation of Michigan superintendents in smaller systems. Moderator-topics, 44: 203, November 29, 1923.

A study based on questionnaires returned by 138 Michigan superintendents in towns of less than 2,000 population. Gives teaching experience, also type and scope of training from elementary grades to date of this study.

English, Vera Mae. Practice schools for training rural teachers. Thesis, George Peabody college for teachers, 1922.

Discusses the extent to which State normals are providing facilities for practice for rural teachers. The most common practice for rural practice courses is to use rural schools conveniently situated for practice teaching.

Flynn, H. E. Teacher training in the high schools of Minnesota. Journal of rural education, 4: 287-290.

Annual teacher turnover in elementary rural schools of Minnesota is 3,300. Eighty-five per cent have had training equivalent to high-school graduation and some professional training; 90 per cent have had one year of professional training. Analyses financial expenditures of 1,102 training students in Minnesota training departments; describes administration, support of, curriculum, etc., of teacher training high schools in State.

Grant, J. B. A State's teacher training problem. George Peabody college for teachers. Contribution no. 18, 1925.

Data collected to serve as a guide in solving the teacher training problem in Arkansas. Recommends better facilities for teacher training, the county unit, a large equalization fund, better certificate laws, and emphasis on negro teacher training.

Hillman, James E. A State program of training rural teachers. National education association. Addresses and proceedings, 1925. p. 554-563. (See also Journal of rural education, 4: 412-420, May-June 1925.)

About 20 per cent of public school teachers are teaching in one-teacher schools in the United States. Possible reduction of one-teacher schools is about 60 per cent. Number of rural supervisors ranged from four to the local unit to none for whole State. Five States have minimum uniform salary schedules. North Carolina is attempting to solve its teacher-training problem through: institutions of higher learning, approved summer schools, teacher-training departments in high schools, extension work, and county summer schools.

Idaho State teachers' association. Report of committee on teachers' salaries and shortage. Idaho teacher, 2: 216-217, January, 1921.

A study of teachers' salaries and teacher shortage in Idaho. Recommends continuation of study for future, more and better support of State educational institutions in training of teachers, better living conditions, longer tenure, and better salaries.

Report of committee on professional standards and progress. Idaho teacher, 2: 218-222, January 1921.

To help in working out some attainable professional standards, 50 questions on social, economic, and scholastic experiences were given to a representative group, North Central Section, Idaho State teachers' association. Data on the 117 rural teachers reporting show that: The median age is 21; there are 10 women to one man; the median normal training is one year; the median average of service is 27 months; the average annual salary is \$971 and the average expenditure \$799; the average teacher owns no property, and has meager opportunity for social activities. Recommendations concerning rural teachers: At least two years or its equivalent of standard normal school work, and a standard average salary of \$1,200.

Ireland, E. W. Training teachers in service in the western Connecticut supervisory region. Journal of rural education, 2: 257-265, February 1923.

Of 207 teachers studied, 55 per cent were teaching for first time. About 50 per cent were teaching in one-room schools; 52 per cent were reared in larger villages and cities. Problem met by: Establishment of model schools, teachers' meetings, visitation, classroom demonstrations, teachers' institutes, summer schools.

Ivy, H. M. Teacher preparation. Mississippi educational advance, 17: 119-126, January 1926.

An attempt to determine whether the teacher situation has improved since an investigation in 1921. Source of data: Questionnaire sent to students in normal schools. Conclusion: There is a tendency for the teaching force in Mississippi to become more stable; teachers are making greater efforts to equip themselves educationally; they are older and are teaching longer.

What is the relation of academic preparation, experience, intelligence and sex of the rural teachers of Mississippi to their salary? George Peabody college for teachers. Contribution no. 10, 1924.

Questionnaires to teachers in 14 regional summer normal schools, standard achievement tests, and Otis intelligence tests. The combined effects of training, experience, and sex and achievement on salary are significant but there are other factors not enumerated whose combined effects on salary are probably equal in weight.

Jennings, Joe. Beginning teachers in the rural elementary schools of Tennessee, 1923-24. Journal of rural education, 4: 363-367, April 1925.

Purpose of study was to ascertain number of new teachers needed annually. Total of 9,186 teachers employed. Tables show ages, certification, training of beginning teachers. Poorest teachers in one-room schools.

King, LeRoy Albert. Status of the rural teacher in Pennsylvania. Washington, D. C., Government printing office, 1921. 87 p. 8°. (U. S. Bureau of education. Bulletin, 1921, no. 34.)

Data on the academic and professional training of 1,440 teachers of one-room schools in 18 counties of Pennsylvania were obtained from teachers' replies to questionnaires. The training of this group of teachers may be summarized as follows: (1) Elementary education—an average of 68.2 months for those who attended township schools (80 per cent) and 70.8 months for those who attended borough schools (20 per cent); (2) secondary education—four years course completed by only 22 per cent, partially completed by 39 per cent, and the remaining 39 per cent were without this type of education except for special subjects studied in the ninth and tenth years of one-room schools; (3) professional training—four-year normal school course completed by only 18 per cent, partially completed by 6 per cent, and the remaining 76 per cent were without this type of training; (4) training during service—summer normal schools attended by 12 per cent, summer local or county normal schools attended by 8 per cent, summer private academies attended by 10 per cent, and the remaining 62 per cent were without supplementary training. Provision for training facilities in high schools, in county training schools, or in additional normal schools recommended.

Marsh, Arthur L. Current salaries of Washington teachers. Washington education journal, 4: 216-217, March 1925.

"A survey of salary medians for 1924-1925 by districts and district groups."

Data obtained for the year 1924-1925 from district and county superintendents. Of 1,188 districts reporting, 17, having a population of 1,000 to 2,499, paid a median salary in elementary teachers of \$1,250; 38 districts, population 500 to 999, paid a median salary of \$1,217; 56 districts, population 250 to 499 paid \$1,141; 173 districts, population 100 to 249, paid \$1,161; 1,188 districts, population under 100, paid \$1,058.

Teachers' salaries in Washington. Washington education journal, 4: 185-186, February 1925.

A statistical study of teachers' salaries from 1913 to 1924. Graphs showing cost of living increase with salary increase. Indicates salaries stabilized and on good level.

Martin, J. O. Training of teachers serious problem in Georgia. Home, school, and community, 16: 17, 28, July 1924. (See also 52d annual report of the Georgia State department of education. p. 10-14.)

Tabulations, based on State-wide school survey, of the educational qualifications of white teachers in 93 Georgia counties. Data show that 30 per cent of the teachers have had tenth grade training or less; 27 per cent completed eleventh grade only; 18½ per cent attended college or normal school one to three years. Data show also that State institutions have capacity enrollment or are overcrowded. Recommends study of funds necessary to make State institutions adequate, additions to the university, provision for monthly payment of teachers, and financial and supervisory aid in further consolidation of schools and construction of buildings.

Michigan State teachers' association. Committee on salaries. Teachers' salaries in Michigan. Part I. Status of teaching in the rural schools. Lansing, Mich. 1925. 633 p. questionnaire, tables. (Bulletin no. 5.) (See also Michigan education journal, May 1925.)

A report of salaries and teaching conditions for rural teachers in Michigan, 1923-24. Questionnaire replies from 4,323 teachers in one, two, three, and four-room schools. Data on salaries, preparation, and experience. Median salary, \$847; average preparation 4.4 years above graduation from eighth grade; median experience, 3.3 years; little or no relation between amount of preparation, experience, and salary. Recommends better rural teaching, training, and salary.

Missouri. State superintendent of public schools. Facts concerning public education in Missouri. Chapter 4. Certification of teachers in Missouri. Jefferson City, Mo. [1925.] p. 61-93, tables. 8".

A survey of the training of rural teachers in Missouri in 1923 showed that 15.2 per cent of the total number (9,000) had no high-school training, and only 57 per cent had more than four years' high-school preparation. Nearly one-half of the rural teachers, 45.9 per cent, had no normal training, and only 9.5 per cent had two years or more of such training. Among the recommendations are the following: (1) That the certificate should indicate the type of position for which the holder has specifically prepared himself; (2) that the types of certificates should be (a) rural teacher's, (b) elementary teacher's, (c) high-school teacher's, and (d) administrator's and supervisor's; (3) each of the certificates should represent the same amount and quality of preparation regardless of the agency granting; and (4) no permanent certificate should be issued until the applicant has had two or three years of successful experience.

Myron, Arthur Oliver. Normal training in South Dakota high schools. Thesis. Department of education, University of South Dakota, 1923.

A general study of normal training in the high schools of the State. Statutes of the State, reports of the superintendent of public instruction, and questionnaires to 61 high schools maintaining normal training courses used for sources of information.

Although established by law in 1919 by 1922-23 one-third of all accredited high schools maintained normal training courses; standard requirements for rural teachers.

have been raised; only 50 per cent of normal training students enrolled actually enter the teaching field; normal training teachers are given too much work in addition to normal training duties; practice teaching unregulated; general lack of uniformity among the different departments. Conclusions are that normal training should not be continued in its present form; State aid should be based on number of graduates receiving teaching certificates; students should be more carefully selected; high schools with only three or four teachers should not try to offer normal training courses; normal training departments should be a separate and distinct unit in a high school; qualified instructors should be employed and given no other subjects to teach; uniform State standards should be set up and maintained for the regulation of the normal training departments in the high schools of the State.

Ohio State teachers' association. Educational council. Teacher training committee. Teacher training as a State function. Report, December 1925. Columbus, Ohio, Ohio State teachers' association, 1925. 44 p. tables, figures, 8°.

An investigation to determine how Ohio can provide for her schools an adequate supply of trained teachers. Data from registrations for 1923-24 in State-supported colleges for training teachers and from reports on county normal schools. Recommendations: (1) Gradual elimination of county normals; (2) minimum of 25 full-time students and 2 full-time instructors; (3) no county normal within a radius of 50 miles of a State teachers college (Wilberforce excepted); (4) immediate provisions for establishment of additional teachers colleges.

Parkinson, Burney L. The professional preparation and certification of white elementary and secondary public-school teachers in South Carolina. Columbia, S. C., University of South Carolina (Extension division), 1926. xiv+270 p. tables, 8°. (University of South Carolina. Bulletin no. 184, June 1, 1926.)

Data based on questionnaire study from 3,807 rural elementary school teachers in 1924-25. Forty per cent had two or more years of college education (principally academic—only 25 per cent of students attended State supported colleges); 42 per cent had not more than two years of high-school education; 19 per cent had only elementary school education; and 28 per cent never attended summer school, the remainder averaged 10 weeks in attendance. Sixty-three per cent had credit in professional courses in education, with an average of 10 semester hours; 18 per cent taught grades 1 to 7 inclusive; 72 per cent, three or more grades. The annual turnover was 15 per cent; median years of teaching service 4.8; median annual salary \$737. Definite recommendations made.

Pennsylvania. Department of public instruction. Educational surveys. Report of the committee on normal schools. [Harrisburg, Pa.] 1925. p. 201-335. tables, 8°.

This report is the result of work of a committee, William C. Bagley, director, appointed by the governor of the Commonwealth of Pennsylvania, April 15, 1924, to make a survey of the State normal schools. The committee found that 18.7 per cent of the normal school students in 1923-1924 came from farm homes, and that only 3.9 per cent, or 275, of these students were enrolled in the rural school curricula. Suggestions for solving the problem of training teachers for rural schools were as follows: (1) By providing higher salaries for teachers; (2) by consolidation of rural schools; (3) by lengthening the rural curriculum; or, preferably, (4) by special subsidies for students electing the rural curriculum.

Mynolds, Annie. Rural teacher training in Wisconsin. Journal of rural education, 2: 174-185.

A report of a questionnaire study of 68 Wisconsin rural teacher training institutions to determine the extent to which (1) students in these schools have opportunity for rural school practice and additional rural contracts, for participation in educational excursions, and for becoming acquainted with progressive recent school legislation; (2) teachers in these schools assist with local rural community meetings, and visit schools in which their graduates are teaching.

Study shows by quoting exact figures that considerable variation exists in regard to all activities studied. Includes a description of detailed procedures recommended for increasing extent and effectiveness of activities considered.

Rogers, Don C. The relation of Iowa teachers' salaries, laborers' wages and the cost of living—1913-1921. *Midland schools*, 35: 309-316; May 1921.

A study to throw light on the salary question in Iowa for the school year 1921-22. (Salary data on rural teachers given separately.) Data from *Midland schools directories* 1913-1921, Burgess' "Trend of school costs," Bureau of labor statistics since 1913, and replies to questionnaires. Study shows that during 1917-1920 teachers' salaries lagged at least a year and a half behind the rise in living costs; that in 1921 salaries had not caught up with those costs; and that, despite a decrease in the cost of living, the living expenses of teachers actually increased in 1920-21. Concludes that salaries should be increased.

Ross, Carmori. The status of county teachers' institutes in Pennsylvania. Chapter 5. The county institute as an agency in the improvement of teachers in service. Philadelphia, Pa., 1922. p. 88-118, tables. 8°.

Questionnaire replies from county, district, and State superintendents, teachers, and prominent educators supplied the data for this study. Of 182 rural teachers in two typical counties in Pennsylvania only 27 per cent of the 80 per cent holding temporary certificates preferred summer sessions to institutes as means of professional improvement. Teachers gave "professional inspiration" as the most valuable contribution of the institute, and rural teachers ascribed equal value to social contacts and methods. Superintendents and principals preferred summer sessions to institutes, and prominent educators did not consider that the institute as organized contributed to professional training. Five constructive suggestions: (1) Abolish county institutes; (2) plan for their improvement; (3) curtail their time and improve them; (4) make them permissive under certain conditions; and (5) legalize teachers' associations.

Russum, Elizabeth. Teacher turnover. *Idaho teacher*, 6: 162-164, January 1925.

In September, 1924, 63 per cent of the inexperienced teachers in Idaho were in the rural schools. Of the teachers who had nine weeks of training 88 per cent were in rural schools, while 62 per cent of those with two years of training were in rural schools. All of these were without experience.

Sharp, Lawrence Alexander. Present status of rural teachers in the South. Nashville, Tenn., George Peabody college for teachers [1922?]. 83 p. tables, graphs. 8°. (George Peabody college for teachers. Contributions to education, no. 2.)

The purpose of this study is to present data on the tenure of white rural teachers in 16 Southern States, their reasons for leaving rural schools, and their reasons for changing from one position to another. Data were obtained from educational literature, from visits to county superintendents, and from questionnaires to 3,226 teachers. Data show that the teaching life of the median rural teacher in the South is four years in one and two-room schools and five years in larger schools, that he has not taught more than two consecutive years in one school, and that tenure is improved by larger schools. Data indicate that of the teachers who left rural schools 23.7 per cent left "to get something more remunerative," 21.7 per cent "to get married," and 17.4 per cent "to go into another county." Outstanding reasons why rural teachers change positions, teachers and county superintendents agreed, were "better salary" and "to be closer home." Reasons given by county superintendents and ignored by teachers were "Patrons didn't like him," "to get into graded schools," and "changed by the county superintendent." Reasons given by teachers and ignored by superintendents were "Patrons took no interest in school," "community gossip," and "children hard to discipline."

Simpson, Alfred D. The teaching personnel of 95 small towns in Connecticut. Connecticut schools, 7: 2-5; March 1928.

Data for 1925 show that the teacher situation in the one-teacher schools had improved over that for 1924. Yet average salary of teachers in one-room schools was only \$1,045 compared with \$1,134 in all elementary graded schools.

Elee, Mary A. Some aspects of the training of teachers for the one-room schools. Master's thesis, Cornell university, Graduate school, June 1925. 22 p. tables, diagrs. 8°. (*Reprinted in Journal of rural education*, 5:50-56, September-October 1925.)

Special training necessary for rural school teachers. Study of 139 training institutions. Results show trend toward establishment of special rural curricula. Too many normal schools offer less training for rural than for urban teachers.

Spier, Etta B. A test of 355 teachers' reading ability, and comparison with their educational advantages. *Journal of rural education*, 1:135-138.

Of 355 teachers tested, 32 per cent were above the mean norm of 72. Teachers educated in rural schools did not score so high as those educated in towns; those who had city elementary education made appreciably higher scores.

Stevenson, Dwight H. A correlation study in teachers' marks. *Educational research bulletin*, 1:190-191, 200, November 1922.

A study of the correlation of the school marks of pupils in 48 county normal schools of Ohio for the first and second semesters of 1921-22 showed a correlation figure of .86. Perfect group correlation was found in 54 per cent of the entire distribution.

The correlation between intelligence ratings and school marks in the county normal schools of Ohio. *Educational research bulletin*, 1:108-111, September 1922.

Terman group test of intelligence, form a, given to students in 49 schools. The range was from 26 to 212 with a possible score of 220. The median was 141.7. Of 108 who dropped out practically 70 per cent had intelligence ratings below the median. The correlation between intelligence score and school marks was .407 for the first semester and .418 for the second semester.

Summers, Alexander. Salaries of country teachers in 1923. Washington, D. C., Government printing office, 1924. 20 p. 8°. (U. S. Bureau of education. Rural school leaflet no. 24.)

Sets forth results of a questionnaire study of salaries of rural teachers in five types of schools—one-teacher, two-teacher, three or more teacher, consolidated, and three or more teacher schools in villages and towns. Compares urban and rural salaries. Tabulates all data.

Swenson, Anna. Teachers' institutes in Minnesota. *Journal of rural education*, 1: 407-410.

Turner, Harvey Leonard. A study of the intelligence of 470 rural teachers in Mississippi. Thesis, George Peabody college for teachers, 1922.

To determine the relationship of the intelligence of 470 rural teachers as indicated by the Otis scale; with grade of certificate held, the training, the experience, and the annual salary. Otis intelligence tests given to 470 rural teachers in institute in Arkansas. Teachers have intelligence about equal to the average adult. The certificate of a teacher is a fair index to his intelligence. There is no relation between experience and intelligence. Teachers ranking highest in intelligence receive the best salaries.

United States. Bureau of education. Courses in rural education offered in universities, colleges, and normal schools. Washington, D. C., Government printing office, 1925. 18 p. 8°. (Rural school leaflet no. 37.)

Study made from catalogs and from questionnaires sent to teacher training institutions. Gives courses, their names, and number of professors offering them, concerned with rural education in the different institutions. Finds 380 courses in 199 institutions.

Wiley, George M. The teaching personnel in small village and rural schools in New York, 1920-21. *Journal of rural education*, 1: 289-296.

Compares academic preparation and professional training of teachers in one and two-room schools and those in three-room and larger schools. Shows that 47 per cent of teachers in one and two-room schools in the State of New York have been trained in training classes in high schools; 44 per cent of those in larger school group are normal school graduates; 17 per cent of the former and 11 per cent of the latter have no professional training. Instructional cost per pupil in one-room schools is much higher than in larger schools.

— The teaching personnel in village and rural schools. Albany, N. Y., University of the State of New York press, 1925. 24 p. tables, charts. 8°. (University of the State of New York. Bulletin no. 823, March 1, 1925.)

A study, first, of 7,862 rural and 9,696 village teachers in New York, 1923-24, and second, of trends in professional improvement over a four-year period, 1920-1924, of the 7,862 teachers of one-room schools. Data, from annual State reports, show that the average rural teacher has had one year of professional training beyond high school, renders four years of service, has a tenure in each position of about one year, is 23 years old; and has a salary of \$24 a week. Trends for the four-year period: (1) Decrease from 36 per cent to 27 per cent in number of teachers with less than high-school training; (2) increase from 15 to 19 per cent in number of teachers with normal school training; (3) increase in salary from \$20 per week for one teacher in three to \$25 per week for one teacher in three; (4) decrease of one year in average age; (5) decrease in contacts of teacher with community; (6) change in number of years experience and tenure slight. Reorganization of the administrative and supervisory school unit recommended.

Wynn, W. T. A study of a group of normal school students. *Journal of rural education*, 1: 180-184.

Young, W. W. and others. Summer occupations of teachers . . . Washington educational Journal, 4: 235-236, April 1925.

A survey of summer occupations in 1924 and in prospect for 1925, of teachers in two typical counties in Washington.